CENTRALIZED CONTRACTOR OPERATED INITIAL FLIGHT SCREENING (IFS) PROGRAM AT PUEBLO, COLORADO

ENVIRONMENTAL ASSESSMENT
(EA)

UNITED STATES AIR FORCE

March 2006

Report Documentation Page

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ENVIRONMENTAL ASSESSMENT FOR
CENTRALIZED CONTRACTOR OPERATED
INITIAL FLIGHT SCREENING (IFS) PROGRAM

Responsible Agency: United States Air Force (USAF), Air Education and Training Command (AETC), Randolph Air Force Base (AFB), Texas.

Proposed Action: Establish a consolidated, and centralized contractor run, Initial Flight Screening (IFS) program for the USAF.

Affected Locations: Pueblo Memorial Airport (PUB), City of Pueblo, Pueblo County, Colorado. Fremont County Airport (1V6), Cañon City, Fremont County, Colorado. Fowler Airport (CO80), Fowler, Otero County, Colorado.

Written Comments and Inquires Regarding this Document Should Be Directed to:

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HQ AETC/A7CCF
266 F Street West
Randolph AFB, TX 78150-4319

Report Designation: Environmental Assessment (EA)

Abstract: The proposed action is to establish a contractor operated consolidated Initial Flight Screening (IFS) program for the USAF. IFS will be the first step in the Air Force Undergraduate Flying Training (UFT) process. IFS will provide ground training, and approximately 19 sorties and 25 hours of flight instruction (which includes final check-ride) to students in preparation for Specialized Undergraduate Pilot Training (SUPT). There are two objectives of the IFS program. The first objective is to provide the United States Air Force (USAF) an opportunity to screen aviation candidates prior to acceptance for UFT attendance. The second objective is to develop the student's aviation skills in order to enhance their ability to succeed in UFT. In addition to analyzing the proposed action in this Environmental Assessment, combination use of auxiliary airports to reduce effects at the main operating location are evaluate as well as the No Action Alternative.

The USAF recently completed a thorough, competitive, best-value source selection process for the IFS program in accordance with statutory and regulatory requirements and procedures governing federal acquisitions. The USAF's Request for Proposal (RFP) for the IFS program contemplated the award of a Firm-Fixed Price Contract that includes a six-month start-up period to be followed by a one-year base period of performance, and up to ten additional option-years of performance. The contractor will furnish all facilities, manning, equipment and support services necessary to screen potential aviator candidates using AETC's IFS course syllabus. The RFP included five main evaluation criteria for the proposals, one of which pertained to environmental factors that required offerors to provide information on environmental training, compliance,

effects and community relations. The USAF's Procurement Executive Office (PEO) for Services served as the Source Selection Authority (SSA) for this procurement. The AETC Source Selection Evaluation Team at Randolph AFB evaluated the offerors' proposals in accordance with the process specified in the RFP and provided a recommendation to the SSA, who selected an apparent successful offeror from Colorado Springs, CO, to operate the IFS program. This award is contingent upon completion of this EA and the signature of a finding of no significant impact upon the environment. The apparent successful offeror's main base of operations will be set up at the former Sperry Tech-1 building located at Pueblo Memorial Airport Industrial Park, Pueblo, Colorado. The use of auxiliary airfields for touch and go operations will be split between the primary location at Fowler Airport, Fowler, Colorado, and a secondary location at Fremont County Airport, Cañon City, Colorado. The USAF action includes the bed down of a small USAF squadron consisting of 17 military personnel, to be phased in over a two year period.

FINDING OF NO SIGNIFICANT IMPACT (FONSI)
FOR
CENTRALIZED CONTRACTOR OPERATED
USAF INITIAL FLIGHT SCREENING (IFS) PROGRAM AT PUEBLO, COLORADO

AGENCY: United States Air Force

PURPOSE: The Air Force has prepared an Environmental Assessment (EA) of the potential environmental consequences of conducting a centralized contractor operated Initial Flight Screening (IFS) program for Air Force personnel at Pueblo Memorial Airport in Pueblo Colorado. This EA is attached and incorporated by reference. In addition to use by the contractor of Pueblo Memorial Airport in Pueblo, Colorado, locations of Fremont County Airport in Cañon City, Colorado and Fowler Airport in Fowler, Colorado will be utilized by the contractor as auxiliary fields for touch and go operations. This United States Air Force EA has been accomplished pursuant to the National Environmental Policy Act (NEPA); the Council on Environmental Quality regulations implementing the NEPA (Title 40 Code of Federal Regulations [40 CFR] Sections 1500-1508), Department of Defense (DoD) Directive 6050.1, and 32 CFR Part 989.

PROPOSED ACTION: Currently, Air Force aviator candidates receive initial flight screening instruction at their choice of 625 various privately-owned civil aviation flight schools located throughout the United States. The candidates select the flight school which then provides the students classroom and in-flight instruction in civilian light aircraft following the current IFS course syllabus. This current arrangement has proven to be less than an ideal flight screening tool for the USAF for several reasons. First, despite the use of the IFS syllabus, the flight schools have produced inconsistent and sometimes unsatisfactory training results for candidates. Candidates who successfully "pass" the current IFS program are nevertheless "washing out" of follow-on SUPT training at an unacceptable rate as a result of failures that should have been apparent under the IFS course syllabus. SUPT is a costly program with limited numbers of available slots; it is not the place to screen aviator candidates. Second, the broad latitude that candidates have under the current IFS program also produces inconsistent results for candidates because it fails to provide a strict, disciplined military training environment that is necessary to foster the military professional development young, fledgling USAF officers and to prepare them for the rigors of SUPT. For these reasons, the USAF's proposed action seeks to establish a centralized and consolidated, contractor operated Initial Flight Screening (IFS) program.

The apparent successful offeror will provide the USAF with a completely "turn-key" IFS operation by supplying the facilities, personnel, equipment, and support services needed to screen potential aviator candidates. The USAF conducted an extensive source selection process to accomplish this action, which included several environmental evaluation subfactors. As a result of the competitive source selection process, the SSA determined through an integrated assessment of all the RFP evaluation criteria that the

apparent successful offeror was the highest rated offeror and provided the most advantageous and best value proposal to the USAF. The apparent successful offeror was announced and the USAF made a conditional contract award, with the condition being completion of an environmental assessment resulting in a finding of no significant impact upon the environment.

As part of the contract, the apparent successful offeror has proposed to complete an interior renovation of the currently existing 193,800 plus square foot two story former Sperry Tech-1 building at Pueblo Memorial Airport Industrial Park in Pueblo, Colorado to house the IFS operation. The apparent successful offeror will renovate the entire facility to ensure adequate lodging, food service, fitness center, classrooms, flight rooms and office space for Air Force personnel. The facility proposed for renovation is located 800 feet west of the approach end of runway 35 at Pueblo Memorial Airport. As part of the contract, three hangers will also be constructed adjacent to the IFS Main Facility and a connecting ramp will be constructed to provide access to the existing taxiway at Pueblo Memorial Airport.

NO-ACTION ALTERNATIVE: Under the No Action Alternative, the USAF would continue to conduct its current IFS program which produces the inconsistent and sometimes unsatisfactory training of future aviators at over 625 different private flight schools. Students would continue to receive 19 sorties and 25 flight hours to demonstrate their proficiency prior to Specialized Undergraduate Pilot Training (SUPT) or Specialized Undergraduate Navigator Training (SUNT). The USAF would continue to experience high attrition rates in SUPT and SUNT as a result of this inconsistent and sometimes unsatisfactory training, as well as continue to lose the military rigor desired early in a newly commissioned officer/aviators career. This no-action alternative will continue to make it virtually impossible to reliably pipeline future USAF aviators through the Air and Space Basic Course (ASBC), which is required of all newly commissioned officers.

ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION: The best value source selection process, identified above, considered proposals from several other competing offerors through an integrated assessment of all RFP evaluation criteria. There was no specification of location in the RFP for the contractor's operation. Evaluation criteria required all offerors to demonstrate their proposal's satisfactory compliance with several environmental sub-factors. The apparent successful offeror was the highest rated offeror and provided the most advantageous and best value proposal to the USAF in this process. Therefore, the proposal to locate the operation in Pueblo, Colorado is the only alternative (besides the no-action alternative) being considered in this Environmental Assessment.

SUMMARY OF FINDINGS: Implementing the proposed action will not result in any significant direct, indirect, or cumulative effects upon the environment. Specifically, the interior alteration of the IFS main facility is consistent with Pueblo's current land use plan. Minor, short-term air quality impacts will occur during construction. Air quality impacts from flight operations will be insignificant. Air quality around Pueblo Memorial

Airport, Fowler Airport and Fremont County Airport is in attainment and a conformity determination pursuant to the Clean Air Act is not required. The Colorado State Historic Preservation Officer concurs that no historic or cultural resources will be affected. During construction and operation, minimal noise will be produced. However, the site is physically isolated from any residential areas. With regard to potential flight operations noise, the apparent successful offeror has been provided the FAA comments for response and coordination.

The project will have a beneficial economic effect for the Pueblo area. With regard to public comment, a notice of the availability of the attached EA and draft FONSI for public review and comment was provided on 15 April 2006 with an advertisement in the local newspapers (*Pueblo Chieftain, Fowler Tribune & Cañon City Daily Records*). The document was also available at the Pueblo City-County Library District, Cañon City Public Library and the Fowler Public Library. No comments were received from the public. Four agency comments were received. The Army Corps of Engineers, the Colorado Division of Wildlife, and Fremont County Airport concurred with the attached Environmental Assessment's conclusions. Comments from the Federal Aviation Administration were incorporated into the final Environmental Assessment. All comments from the Federal Aviation Administration, including those regarding the successful offeror's noise contours and mitigation, were forwarded to the successful offeror for response and coordination.

Finding of No Significant Impact: In accordance with the requirements of the National Environmental Policy Act, the Council on Environmental Quality Regulations, and 32 CFR Part 989, I conclude establishment of a single site, contractor run, Initial Flight Screening (IFS) program for the USAF will have no significant direct, indirect, or cumulative impact upon the environment. Accordingly, an Environmental Impact Statement (EIS) is not warranted and will not be prepared.

25 MAY 2006

DENNIS R. LARSEN
Lieutenant General, USAF
Vice Commander

Date

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LIST OF ABBREVIATIONS AND ACRONYMS

1V6	Fremont County Airport
°F	degrees Fahrenheit
AETC	Air Education and Training Command
AF	Air Force
AFB	Air Force Base
AFI	Air Force Instruction
AFOSH	Air Force Occupational and Environmental Safety, Fire Protection, and Health
AFPD	Air Force Policy Directive
AGL	above ground level
ATIS	Airport Terminal Information System
AICUZ	Air Installation Compatible Use Zone
AQCR	Air Quality Control Region
ASBC	Air and Space Basic Course
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
ATC	Air Traffic Control
ATCAA	Air Traffic Control Assigned Airspace
BASH	Bird/Wildlife-Aircraft Strike Hazard
CAA	Clean Air Act
CCR	Code of Colorado Regulations
CDPHE	Colorado Department of Public Health and Environment
CEQ	Council on Environmental Quality
CFI	Certified Flight Instructor
CFR	Code of Federal Regulation
CO	Carbon Monoxide
CO80	Fowler Airport
COFWS	Colorado Field Office of the US Department of Interior Fish and Wildlife Service

CY	Calendar Year
dB	Decibel
dBA	A-weighted decibel
DNL	Day-Night Average Sound Level
DoD	Department of Defense
DEA	Draft Environmental Assessment
EA	Environmental Assessment
EIAP	Environmental Impact Analysis Process
EIS	Environmental Impact Statement
ELP	Emergency Landing Pattern
EM	Environmental Management
EMS	Environmental Management System
EO	Executive Order
ESA	Endangered Species Act / Environmental Site Assessment
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FICON	Federal Interagency Committee on Noise
FLIP	Flight Information Publication
FONSI	Finding of No Significant Impact
FY	fiscal year
GOV	Government Owned Vehicle
HAP	High Accident Potential
HIRL	High Intensity Runway Lighting
HQ	Headquarters
HUD	U.S. Department of Housing and Urban Development
IFR	Instrument Flight Rules
IICEP	Interagency and Intergovernmental Coordination for Environmental Planning
IFS	Initial Flight Screening

IFT	Introductory Flight Training
IMC	Instrument Meteorological Conditions
INM	Integrated Noise Model
L_{dnmr}	onset-rate adjusted monthly day-night average A-weighted sound level
L_{max}	Maximum Sound Level
LESCO	Logistics, Engineering & Environmental Support Services
LTO	landing and takeoff
mg/m^3	milligrams per cubic meter
Mi	statute mile
MOA	Military Operations Area
Mph	miles per hour
MSDS	Material Safety Data Sheets
MSL	Mean Sea Level
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
Nm	nautical mile
NO_2	Nitrogen Dioxide
NWS	National Weather Service
O_3	Ozone
PEDCO	Pueblo Economic Development Corporation
Pb	Lead
P.L.	Public Law
PM_{10}	particulate matter less than or equal to 10 microns in diameter
POV	Privately Owned Vehicle
ppm	parts per million
PSD	Prevention of Significant Deterioration
PUB	Pueblo Memorial Airport
RCRIS	Resource Conservation and Recovery (Act) Information System

ROI	Region of Influence
SAS	National Weather Server Access Service
SEL	Sound Exposure Level
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO_2	Sulfur Dioxide
SUPT	Specialized Undergraduate Pilot Training
T&E	threatened and endangered
TGO	touch-and-go
tpy	tons per year
U.S.	United States
UCSOT	Undergraduate Combat Systems Officer Training
UFT	Undergraduate Flying Training
USAF	United States Air Force
U.S.C.	United States Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VFR	Visual Flight Rule
VMC	Visual Meteorological Conditions
VOC	volatile organic compound
WCID	Water Control and Irrigation District
$\mu g/m^3$	micrograms per cubic meter

1. Purpose and Need for Action

1.1. Project Summary and Background

Currently the USAF is conducting an Introductory Flight Training (IFT) program for its future aviators at various private, civilian aviation flight schools. Over 625 different schools have been used. At any one time, 200-600 Air Force officers are being trained at between 75-150 different public airports. This decentralized IFT program has resulted in inconsistent and sometimes unsatisfactory screening and training of future USAF aviator candidates. This proposed federal action is to return to a consolidated, contractor run, Initial Flight Screening (IFS) program for the USAF.

With regard to this proposed action, the USAF recently completed a thorough source selection process which included evaluation factors of overall program management capability, training facilities & support functions, aircraft & maintenance management, environmental management, mission organization and small business contracting plan. Environmental sub factors were encapsulated in the evaluation process, and their subjects included: Environmental training; Compliance, Direct, Indirect, and Cumulative effects of the IFS on contractor proposed locations; Program Growth and Start-up; and Community Partnership. During the source selection process the USAF changed the name of the program from an Introductory Flight Training (IFT) program to an Initial Flight Screening (IFS) program. Text herein and the appendices use IFT and IFS interchangeably for the same program.

The National Environmental Policy Act (NEPA) requires the evaluation by the United States Air Force (USAF) of the direct, indirect, and cumulative effects of a proposed federal action on the surrounding environment. The USAF has codified their environmental impact analysis process at 32 Code of Federal Regulations (CFR) 989.

1.2. Proposed Action Locations

The RFP did not specify a location for the IFS program. This proposed action location at Pueblo, Colorado, is the result of an eighteen-month long competitive source selection process that was conducted in accordance with statutory and regulatory requirements for federal procurement actions. The apparent successful offeror proposed using the former Sperry Tech-1 building located at the Pueblo Memorial Airport Industrial Park as their main operating location. The apparent successful offeror has also proposed using airports at Fremont County Airport (1V6), Cañon City, Fremont County, Colorado and Fowler Airport (CO80), Fowler, Otero County, Colorado as auxiliary fields to conduct touch and go's (TGOs).

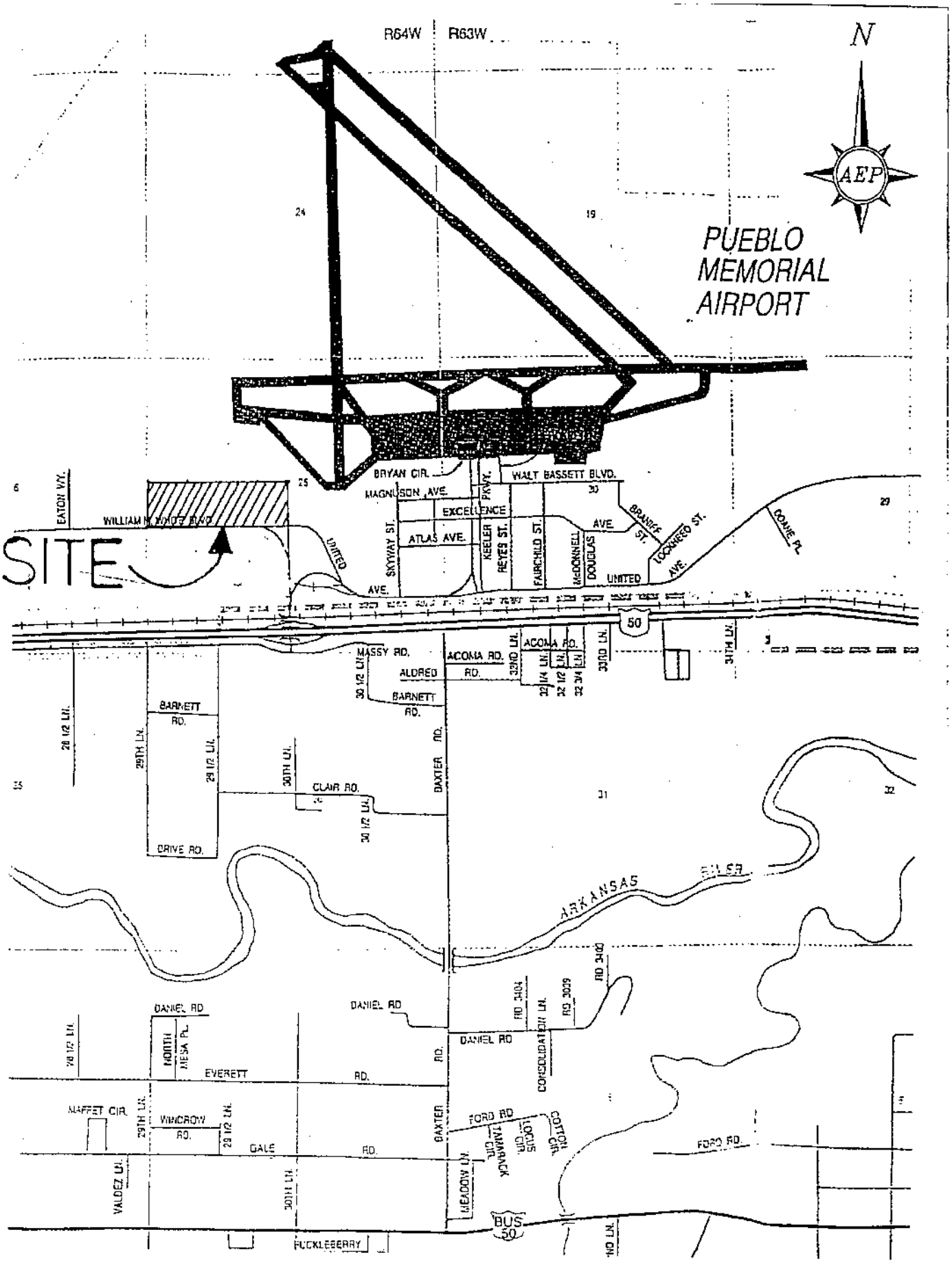
The USAF's Procurement Executive Official (PEO) for Services served as the Source Selection Authority (SSA) for this procurement. Acting upon the recommendation of a highly-skilled and dedicated Source Selection Evaluation Team (SSET) at Randolph AFB, Texas, the SSA conducted an integrated assessment of all offerors' proposals according to the RFP evaluation criteria. The SSA determined that the apparent successful offeror's IFS proposal at Pueblo, Colorado, was the most highly rated and offered the most advantageous and best value to the USAF and, therefore, was selected. The USAF made a conditional contract award to the

apparent successful offeror, with the condition being completion by the Air Force of an Environmental Assessment and a Finding of No Significant Impact (FONSI).

1.3. Scope of the Environmental Assessment (EA)

The National Environmental Policy Act (NEPA) requires the identification and analysis of potential direct, indirect, and cumulative environmental impacts of proposed federal actions before those actions are taken. The intent of NEPA is to protect, restore, or enhance the environment through well-informed federal decisions. The Council on Environmental Quality (CEQ) was established under NEPA to implement and oversee federal policy in this process.

The regulations for implementing NEPA are codified at Title 40 of the Code of Federal Regulations (CFR), Parts 1500-1508, Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act. The USAF's implementing regulation for NEPA is the Environmental Impact Analysis Process (EIAP), codified at 32 CFR Part 989.



AEP	ABEL ENGINEERING PROFESSIONALS, INC. 102 SOUTH ONEIDA STREET PUEBLO, COLORADO 81003 (719) 546-2235	VICINITY MAP	FIGURE 1

LEGEND

ITEM	EXISTING	FUTURE
DEVELOPMENT		
PROPERTY LINE		
FENCE	X	XX
BUILDING RESTRICTION LINE		
RUNWAY SAFETY AREA (RSA)		
RUNWAY OBJECT FREE AREA (OFA)		
RUNWAY VISIBILITY ZONE	RVZ	
RAIL ROAD		
CONTOUR	4800	
AIRPORT REFERENCE POINT		
SECTION CORNER		
WIND CONE		
BUILDINGS		
EASEMENT		
RUNWAY PROTECTION ZONE (RPZ)		
NAVIGATIONAL AID CRITICAL AREA		

LINE OF SIGHT LEGEND

4698.2 / 13.9	LOS ELEVATION / FILL AMOUNT
4693.6 / (23)	LOS ELEVATION / CUT AMOUNT
———	LINE OF SIGHT
— — —	CUT / FILL LINE

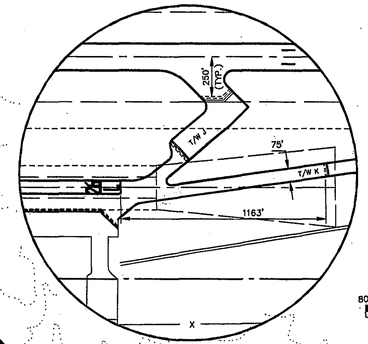
NOTES:

1. BUILDINGS IN THE INDUSTRIAL PARK ARE IDENTIFIED ON THE AIRPORT PROPERTY MAP.
2. PLEASE SEE BUILDING AREA LAYOUT FOR DETAILED INFORMATION ON AIRPORT BUILDINGS AND AIRCRAFT APRONS.
3. RUNWAY 8R/26L 4,073' x 75' (N 88°18'36" E TRUE BEARING) IS AVAILABLE TO AIRCRAFT WEIGHING UNDER 12,500 LBS. DURING DAYLIGHT HOURS ONLY.
4. NO THRESHOLD SITING SURFACE OBJECT PENETRATIONS FOR ALL RUNWAY THRESHOLDS.
5. NO RUNWAY OFZ OBJECT PENETRATIONS FOR ALL RUNWAYS.
6. RUNWAY DISTANCE REMAINING SIGNS ARE PLANNED FOR INSTALLATION ON RUNWAY 8L/26R AND RUNWAY 17/35 BUT ARE NOT DEPICTED ON THE DRAWING FOR PURPOSES OF CLARITY.
7. ALL RUNWAYS HAVE RED/GREEN THRESHOLD LIGHTS LOCATED INBOARD OF THE RUNWAY EDGE LIGHTS EXCEPT RUNWAY 8R/26L, WHICH IS FOR DAYTIME VFR USE ONLY.
8. ONLY THE EXISTING 8L/26R RUNWAY SAFETY AREA IS SHOWN. THE FUTURE RUNWAY SAFETY AREA WILL BE 580' WIDE TO ACCOMMODATE CATEGORY D AIRCRAFT.
9. COORDINATE WITH LOCAL FAA TECHNICIANS TO PROTECT UNDERGROUND UTILITIES.

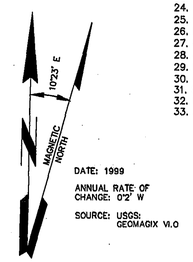
AIRPORT FACILITY LIST

(E) EXISTING (F) FUTURE (R) RELOCATE/REMOVE

1. TERMINAL BUILDING (E)
2. CONTROL TOWER (E)
3. ARFF BUILDING (E)
4. T-HANGAR (E)(F)
5. TRAVELAIRE (E)
6. BEACON (E)
7. FLOWER AVIATION OFFICE (E)
8. GENERATOR BUILDING (E)
9. ELECTRICAL VAULT (E)(R)
10. WEATHER BUREAU REMOTE SITE (E)(R)
11. REMOTE TRANSMITTER (E)
12. DIRECTION FINDER (E)
13. VASI-2 (E)
14. C.F. AND I. HANGAR (E)
15. BLITZ HANGAR (E)
16. BULK GAS (E)
17. FLOWER EAST HANGAR (E)
18. PEAK AVIATION (E)
19. FLYING WINDS HANGAR (E)
20. COMPASS ROSE (E)
21. MAINTENANCE BUILDING (E)
22. MUSEUM (E)
23. SEGMENTED CIRCLE WITH LIGHTED WIND CONE (E)
24. LOCALIZER ANTENNA (E)
25. LOCALIZER EQUIPMENT SHELTER (E)
26. RADAR REFLECTOR (E)
27. MIDDLE MARKER (E)
28. REIL (E)(F)
29. PAPI (E)(F)
30. GLIDE SLOPE ANTENNA (E)
31. SSALR (E)
32. MALSR (E)
33. AIRPORT SURVEILLANCE RADAR (E)



DETAIL "A"
TYPICAL STOP BAR LOCATION



DATE: 1999

ANNUAL RATE OF CHANGE: 0°2' W

SOURCE: USGS: GEOMAGIX V1.0

800 0 800 1600 2400

SCALE IN FEET
1 METER = 3.2808 FEET
1 FOOT = 0.3048 METERS

APPROVED

SUBJECT TO LETTER DATED: _____

FEDERAL AVIATION ADMINISTRATION
DENVER AIRPORTS DISTRICT OFFICE

DATED: _____

CASE NO.: 99-DEN-223-NRA

ACCEPTED: CITY OF PUEBLO, COLORADO

DATE

Isbill Division
Raytheon Infrastructure Inc.
Raytheon Airport Services
PHONE (303) 843-2200 FAX (303) 843-2700

PUEBLO MEMORIAL AIRPORT
PUEBLO, COLORADO

PUB-2126
89582.916

PUB-ALP2

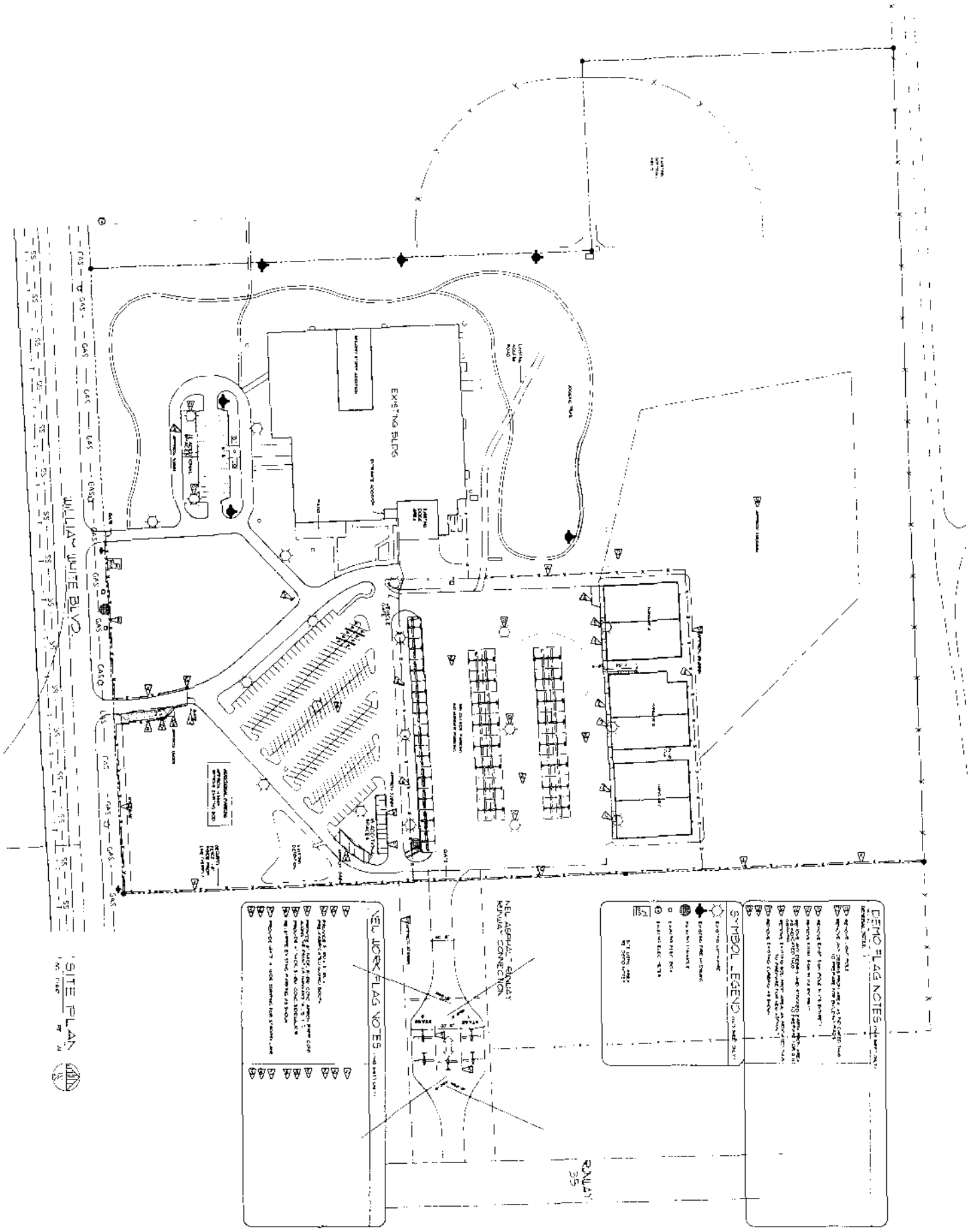
REV. NO.	DATE	DESCRIPTION	APP.

DES. D.F.N.
DR. D.C.C.
CH. C.V.N.
APP. H.G.I.

AIRPORT LAYOUT PLAN

DATE JUNE 2000 EXHIBIT I

I:\PUB\PLANNING\pub-alp2.dwg 6-26-2000 2:43PM DCC



DOSS AVIATION

PILOT TRAINING FACILITIES

1 WILLIAM WHITE PUEBLO, CO.

HGE ARCHITECTS PUEBLO, CO

SHEET A1.1

2. Description of Proposed Action and Alternatives

2.1. Description of the Proposed Action

Currently Air Force personnel are initially trained and screened at 625 various civil aviation flight schools throughout the United States, which presents inconsistent and unsatisfactory results. The USAF currently pays for most of these training programs, although rarely some individuals do pay for their own training. The proposed federal action is to establish a consolidated, contractor operated, IFS program for future USAF aviators.

The Initial Flight Screening (IFS) program will be the first step in the Air Force Undergraduate Flying Training (UFT) process. This centralized instruction and screening will more accurately and consistently determine Air Force aviator candidates' suitability to advance to Specialized Undergraduate Pilot Training (SUPT) or Specialized Undergraduate Navigator Training (SUNT). SUPT and SUNT are the mandatory follow-on USAF flight training programs for pilot or navigator flight candidates, and they utilize military aircraft at military installations.

There are two driving factors behind the USAF desire to return to a single location IFS. First, the USAF desires a return to military rigor and standardization of IFS-type instruction. Second, the USAF desires the ability to more consistently "pipeline" students into UFT as well as the Air and Space Basic Course (ASBC), which is a course required of all newly commissioned USAF officers. This proposed action will provide the consistency in instruction and screening standards to ensure Air Force aviators are screening and adequately prepared for additional training and later pipe-lined correctly. IFS will provide required ground training as well as flight instruction which includes flying 19 sorties and 25 hours of flight instruction (which includes final check-ride) for students.

The apparent successful offeror will locate its main base of operations for IFS at the former Sperry Tech-1 building located at Pueblo Memorial Airport Industrial Park, Pueblo, Colorado. The use of auxiliary airfields for touch and go operations will be split between the primary location at Fowler Airport, Fowler, Colorado, and a secondary location at Fremont County Airport, Cañon City, Colorado. The USAF IFS action will specifically encompass the bed down of a small USAF squadron consisting of 17 military personnel, to be phased in over a two year period.

2.1.1. Proposed IFS Facilities / Preparation

The apparent successful offeror proposes to renovate a currently existing 193,800 plus square foot two-story former Sperry Tech-1 building to house the entire IFS operation. This facility would be renovated to provide adequate lodging, food service, fitness center, classrooms, flight rooms and office space for USAF personnel. The building is 800 feet west of the approach end of runway 35 at Pueblo Memorial Airport (see Fig. 1). Three hangers would be constructed adjacent to the IFS Main Facility and a connecting ramp would be constructed to provide access to the existing taxiway at Pueblo Memorial Airport.

2.1.2 Bed down of USAF Personnel

A small USAF squadron consisting of 17 military personnel would undergo a Permanent Change in Station (PCS) from former duty locations and be co-located with the apparent successful offeror in the Main Facility. This bed down of 17 active duty USAF personnel would be phased in over a two year period. This bed down includes up to ten military flight instructors (one commander, one operations officer, and up to eight instructor pilots) which will ensure high quality contractor flight training as well as utilization of fair and consistent testing standards.

2.1.3 Training of Temporary Duty (TDY) Military Personnel

USAF personnel undergoing flight training would be on temporary duty orders (TDY). This more rigorous, demanding IFS program will screen temporary duty potential Air Force aviators, thus reducing the attrition rate. This training should also ensure development of the Air Force student's military aviation and officer professional development skills, which will enhance their ability to succeed in UFT.

The IFS program current planned growth calls for training 350 TDY students starting from the date of 1 October 2006 through 30 September 2007, to be followed by 1,100 TDY students starting from the date of 1 October 2007 through 30 September 2008. This notional plan then goes upward to train 1,300 TDY students per year, up to a maximum of 1,700 TDY students starting from the date of 1 October 2008 and following through subsequent option years.

2.2 Alternatives to the Proposed Action

2.2.1 No Action Alternative

Under the No Action Alternative, the USAF would continue to conduct its current IFT program for its future aviators at over 625 different private flight schools. Prospective USAF pilots would not be consistently screened in accordance with military standards. At any one time 200-600 students would be trained at 75-150 different public airports. The USAF would continue to experience higher attrition rates in UFT and lose the military rigor needed early in a newly commissioned officer/aviators career. Implementation of this no-action alternative would prevent the pipelining future USAF aviators through the ASBC, a class which is required of all newly commissioned officers.

2.2.2 Alternatives Considered but Eliminated from Further Study

The best value source selection process considered proposals from several other competing offerors through an integrated assessment of all RFP evaluation criteria. There was no specification of location in the RFP for the contractor's operation. Evaluation criteria required all offerors to demonstrate their proposal's satisfactory compliance with several environmental sub-factors. The apparent successful offeror was the highest rated offeror and provided the most advantageous and best value proposal to the USAF in this process. Therefore, the proposal to locate the operation in Pueblo, Colorado is the only alternative (besides the no-action alternative) being considered in this Environmental Assessment.

3. Affected Environment

The apparent successful offeror has proposed to house the IFS operation at Pueblo Memorial Airport Industrial Park in Pueblo, Colorado as the main location with two auxiliary airports/airfields to support touch and go aircraft operations. With Pueblo Memorial Airport as the main location, 17 full-time military personnel as well as up to 1,700 TDY military personnel (per year) will be based out of that location. The apparent successful offeror has proposed to complete an interior renovation of the currently existing 193,800 plus square foot two story former Industrial Park Sperry Tech-1 building. The apparent successful offeror will renovate the entire facility to ensure adequate lodging, food service, a fitness center, classrooms, flight rooms, and office space are available for Air Force personnel. This facility, proposed for renovation, is located 800 feet west of the approach end of runway 35. To support IFS, three hangers will also be constructed by the apparent successful offeror with access to the existing taxiway at Pueblo Memorial Airport.

3.1 Site Locations

3.1.1 Main Base of Operations

The main IFS facility would be based at the Pueblo Memorial Airport Industrial Park adjacent to Pueblo Memorial Airport 6 miles east of Pueblo, CO. Pueblo Memorial Airport has an Airport Reference Code Design Category of C-III/D-II. The airports' Design category "CIII/DII" accommodates aircraft with approach speeds in the range of 141-166 knots and wingspan in the range of 79-118 feet. However, aircraft in lower categories, such as the Diamond DA20-C1, can operate at the airport. Pueblo Memorial has three hard-surface runways. Runway 8L-26R is 10,496 feet long by 150 feet wide with precision Instrument Landing System (ILS) approaches at both ends. Runway 17-35 is 8,308 feet long by 150 feet wide with non-precision approaches. Both runways are served by GPS approaches, and the tower provides Airport Surveillance Radar (ASR) approaches to all runways. Additionally, the airport operates a third runway (8R-26L) for general aviation which is 4,073 feet long by 75 feet wide. All runways are approved for simultaneous Instrument and Visual Flight Rules (IFR/VFR) departures and arrivals. Historical weather patterns indicate 99% of the time the primary runway is 8L/26R supporting an east-west traffic flow. All runways and taxiways are well maintained and have approved FAA markings. The airport is served by a VOR/TACAN located 3.2 miles east of the field (PUB 116.7, Chan 114). Airport elevation is 4,726 feet above sea level.

The airport is serviced by a Federal Aviation Administration-manned tower which operates from 0600 to 2030 hours, 7 days per week. The tower is manned with four certified controllers (ground, local, radar, and tower supervisor) and is equipped with a dedicated D-BRITE radar system that serves a radius of approximately 40 miles from the field. Pueblo tower is certified for TRA-CAB (radar traffic control and VFR/IFR tower) operations. Currently manning would support the potential growth in air traffic due to IFS operations. Radar operators are in constant contact with, and in control of, all local traffic including that in the vicinity of the selected auxiliary airfields, Fowler Airfield and Fremont County Airport. IFS training sorties will not interfere with VOR airways or Military Training Routes nor would IFS training sorties be negatively impacted by VOR airways or Military Training Routes. The airport supports both UHF and VHF band frequencies and a VHF-only Airport Terminal Information System (ATIS) frequency. The tower is capable of handling multiple air traffic requirements from all three runways simultaneously. The parallel runways are suitable for simultaneous use for departures,

arrivals, instrument approaches, and VFR patterns. The controllers are certified to provide National Weather Server Access Service (SAS) weather observations/reports.

Runway lighting at Pueblo Memorial Airport is as follows:

- RWY 8L -- Precision Approach Path Indicator-4 identical light units placed on the left side of runway (PAPI-P4L), High Intensity Runway Lighting (HIRL), and Simplified Short Approach Lighting System with Runway Alignment Indicator Lights (SSALR)
- RWY 26R – PAPI-P4L, Runway End Identifier Lights (REIL)
- RWY 17-35 – Medium Intensity Runway Lights (MIRL), PAPI-P4L, REIL

The airport is serviced by a 24-hour per day city-funded fire department. The fire department is always manned with three rescue-trained firefighters who maintain dual qualifications as Emergency Medical Technicians to include Advanced Life Support. The firehouse is equipped with emergency equipment for Index B emergency operations and includes two foam trucks and one pumper. The airport fire department is backed by two near-by city fire departments with an 8-10 minute response time to the airport if needed. Contract ambulance service is provided by American Medical Response (AMR). Two hospitals are located six miles from the airfield providing 24-hour emergency services.

All of the proposed military flight training areas would be established in the airspace to the south, east and northeast of the field which is rural and farm/ranch land. There are three military low level routes which transit near Pueblo. All potential traffic conflicts will be accounted for and minimized taking advantage of established FAA collision-avoidance procedures.

Airport security is enhanced by a six-foot chain link fence around the airfield ramp area and three-strand barbwire fencing around the remaining perimeter. The IFS ramp would be fenced and would become a part of the existing security zone. The airfield meets all security requirements dictated by the Transportation Security Agency under the Homeland Security Directorate. The parking ramp will be lit at night.

In October 2002, the Greater Pueblo Chamber of Commerce conducted a Phase I Environmental Site Assessment (ESA) of the proposed site location. This ESA was completed according to applicable ASTM Standard E-1527. It was intended to establish present environmental conditions, determine if potential environmental concerns exist, and provide a professional opinion as to the impact of any identified environmental concerns on this property. The ESA encompassed a review of maps of the property; photographs; federal, state, and local agencies; and site reconnaissance to document any environmental conditions. The findings determined that there were only minor areas of concerns (AOC) found adjacent to the proposed main facility. They were:

- One RCRIS (The Resource Conversation and Recovery Act database that includes selected information on sites that generated, store, treat, or dispose of hazardous waste as defined by the Act) site was within 0.25 miles of the site.
- A sanitary landfill (Pueblo Memorial Airport Landfill) in post closure status is located roughly 2.0 miles east of proposed site.

- There are two (2) 10,000 gallon above ground diesel fuel tanks used to fuel emergency generators. An exterior fueling station is also located adjacent to the diesel tanks and it is used to fuel ground maintenance equipment.

3.1.2 Auxiliary Fields – Fowler Field and Fremont County Airport

Two auxiliary airfields are proposed by the apparent successful offeror to support student training opportunities. The first is Fowler Field, a privately owned airstrip. The second is Fremont County Airport, located in Cañon City, CO.

Fowler Field, the privately owned airstrip, is located 22 miles east-southeast from Pueblo. It offers two hard-surfaced runways (04/22 and 130/310) that are 3,500 foot long for VFR operations and support touch and go operations. Air traffic is handled by a Common Air Traffic VHF (CTAF) frequency. Limited aircraft fuel service is available for contingency use. A manned fire fighting vehicle would be present during IFS operations. Ambulance/EMT service is located approximately four miles away from the airfield, in the City of Fowler.

Fremont County Airport, Cañon City, CO is located 28 miles west of Pueblo. Runway 11/29 is a 5,399 foot, hard-surface runway equipped with MIRL, REIL and PAPI lighting systems. The Pueblo Tower offers limited radar service at Fremont. A CTAF radio frequency is utilized for VFR traffic. The airport offers two Jeppesen GPS instrument approaches. A small fire station is manned during airfield hours of operation. Ambulance/EMT service is located in Cañon City, approximately four miles away.

3.1.3 Flight Operations at Each Airfield

FAA Order 7210.3U, Facility Operation and Administration, 16 Feb 06, defines Airport Operations Count as: “The airport operations count is the statistic maintained by the control tower. Basically, it is the number of arrivals and departures from the airport at which the airport traffic control tower is located. Specifically, one airport operation count is taken for each landing and takeoff, while two airport operations counts; i.e., one landing and one takeoff, are taken for each low approach below traffic pattern altitude, stop and go, or touch and go operation.” (FAA Order 7210.3U, 16 February 2006.)

The IFS program current planned growth calls for training 350 students starting from the date of 1 October 2006 through 30 September 2007, to be followed by 1,100 students starting from the date of 1 October 2007 through 30 September 2008. This notional plan then goes upward to train 1300 students per year, up to a maximum of 1,700 starting from the date of 1 October 2008 and following through subsequent option years. The maximum estimated annual increase in propeller operations at each airfield are:

- Pueblo Memorial Airport = 98,090 annual operations (Takeoffs/Landings/TGOs)
- Fowler Field = 108,800 annual operations (TGOs)
- Fremont County Airport = 61,200 annual operations (TGOs)

These numbers were calculated assuming a maximum 19 sorties at maximum annual student load of 1,700. Operations at Pueblo Memorial Airport were calculated multiplying 19 sorties by 1,700 students and doubling that to get to 64,600 operations. Overhead operations (includes make up time, etc.) were figured at 10% of 64,600 (6,460) and CFI/Instructor Pilot time figured at 5% of 64,600 (3,230). This provides estimated annual take offs and landings at

maximum capacity at Pueblo Memorial Airport at 74,290. It is estimated that each student would perform a maximum of five TGOs at Pueblo; seven multiplied by two (for each touch and each go) multiplied by 1,700 equals 23,800. At the maximum student load, the total estimated annual propeller operations (take offs/landings/touch and goes) at Pueblo Memorial Airport would be 98,090.

At Fowler Field, each student would perform 32 TGOs over the duration of their training program. At the maximum student load, the total estimated annual propeller operations would be 1,700 multiplied by 32 and doubling that equals 108,800. At Fremont County Airport, each student would perform 18 TGOs. At the maximum student load, the total estimated annual propeller operations would be 1,700 multiplied by 18 and doubling that equals 61,200.

3.2 Air Quality

The Colorado State Ambient Air Quality Standards (SAAQS) for six criteria pollutants—sulfur dioxide (SO2), particulate matter (PM), carbon monoxide (CO), ozone (O3), nitrogen dioxide (NO2), and lead (Pb)—are almost identical to the National Ambient Air Quality Standards (NAAQS) established. A small difference exists with respect to Pb; although the NAAQS (1.5 μg/m3) is specified as an average for a calendar quarter, Colorado regulations make that averaging period equal to one month. The only substantial difference between the state and national standards involves the 3-hour averages of SO2, for which the Colorado standard of 700 μg/m3 (Colorado Ambient Air Quality Standard I.A) is much more stringent than the national standard of 1,300 μg/m3 (40 CFR 50).

With regard to the relevant locations and standards, Pueblo Memorial Airport is located in the San Isabel Intrastate Air Quality Control Region (AQCR), which includes the following counties: Chaffee, Custer, El Paso, Fremont, Huerfano, Lake, Las Animas, Park, Pueblo, and Teller). This main Facility at the Pueblo Memorial Airport, as well as both proposed auxiliary fields at Fowler Field and Fremont County Airport, is located within attainment areas for air quality.

3.3 Water Resources

3.3.1 Surface Water

Surface water resources consist of lakes, rivers, and streams and are impacted by storm water. Surface water resources contribute to the economic, ecological, recreational, and human health of a community or locale.

The apparent successful offeror will engage in both construction and renovation. At construction sites, the main pollutant of concern is sediment. Grading activities remove grass, rocks, pavement and other protective ground covers, resulting in the exposure of underlying soil to the elements. The soil is then easily picked up by wind and/or washed away by rain or snowmelt. Sediment runoff rates from construction sites are typically 10 to 20 times greater than those from agricultural lands, and 1,000 to 2,000 times greater than those of forest lands. Construction activity can contribute more sediment to streams than would normally be deposited over several decades, causing physical and biological harm to waters. The added sediment chokes the river channel and covers the areas where fish spawn and plants grow. Excess sediment can cause a number of other problems for water bodies, such as increased difficulty in

filtering drinking water, and clouding the waters which can kill plants growing in the river and suffocate fish. A number of pollutants, such as nutrients, are absorbed onto sediment particles and also are a source of pollution associated with sediment discharged from construction sites.

The Pueblo Memorial Airport currently has a storm water permit. On March 10, 2003, new regulations came into effect that extended National Pollutant Discharge Elimination System (NPDES) permit requirements to construction sites that disturb one to five acres in size, including smaller sites that are part of a larger common plan of development or sale. Sites only disturbing five acres or more were regulated previously. With regard to the apparent successful offeror, construction/renovation activities (including other land-disturbing activities) that disturb one acre or more will be regulated under the Airport's NPDES storm water permit.

3.4 Hazardous Materials and Wastes

Hazardous materials are those substances defined by the Comprehensive Environmental Response, Compensation, and Liability Act as amended by the Superfund Amendments and Reauthorization Act and the Toxic Substances Control Act. The Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act, which was amended by the Hazardous and Solid Waste Amendments, defines hazardous wastes. In general, both hazardous materials and wastes include substances that, because of their quantity, concentration, physical, chemical, or infectious characteristics, may present substantial danger to public health or welfare or to the environment when released into the environment or otherwise improperly managed. The apparent successful offeror would properly manage be handling hazardous materials and wastes as they perform this contract.

3.5 Noise / Nuisance

Noise is typically defined as unwanted sound, a definition that includes both the psychological and physical nature of the sound (American Industrial Hygiene Association, 1986). Under certain conditions, noise may cause hearing loss, interfere with human activities at home and work, and affect human health and well being in various ways.

There are two primary noise considerations with aircraft operations at each of these three airports. The first is how current aircraft operations affect the existing land-use directly surrounding each airport. The second is how it affects the land-use between each of the three airports. There are a number of noise level metrics to objectively determine if a particular land use is considered to be impacted. These metrics include the day-night noise level (LDN), the sound exposure level (SEL), and the equivalent noise level (Leq). The later two metrics are better for determining nuisance and are more subjective. The LDN is used for determining the likelihood of airport noise impacts, and the Leq was used for the audibility of flyovers. Nuisance can be defined as the substantial and unreasonable interference with the use and enjoyment of land.

To determine existing conditions, each airport was visited to collect surrounding land use information and measure ambient noise levels. Ambient noise level measurements at Pueblo Memorial Airport were taken for approximately 24 hours, and shorter duration samples (< 1 hour) were taken at all other sites. Table 3-1 shows the existing airport statistics. (Hankard Env., Jul 2005, Appendix B.)

Table 3-1 Existing Airport Statistics

Statistic	Pueblo Memorial Airport	Fremont County Airport	Fowler Airfield
Type of Airport	Public	Public	Private
Airport Accessibility	24-hrs	24-hrs	Dawn to Dusk
Average Airport Operations*	62% GA 32% MIL 6% AIR TAXI >1% COMM	83% GA 11% MIL 6% AIR TAXI	100% GA
Daily Aircraft Operations	250	40	negligible
Ambient Noise Level**	53 dBA	53 dBA	30 to 40 dBA

* Approximated from AirNav.com and/or site visit.

** Daytime samples near airport

GA = General Aviation, COMM = Commercial Aircraft, MIL = Military Aircraft & AIR TAXI = Private/Corporate Jets

Source:USAF IFT Preliminary Noise Impact Assessment, 22 July 2005

Current activity at the private airfield at Fowler is negligible, consisting of the occasional crop duster. Fowler Airfield is also located in a sparsely populated rural area.

Current activity at the Fremont County Airport is also still relatively minor. A Fremont County Airport Environmental Assessment developed in October 2004, analyzing the extension of runway 11/29, addressed noise contours which included jet aircraft. Fremont County Airport has airspace easements in the east end on approach and departure. With exception of a federal prison located approximately 1 ½ miles west, the airport is surrounded by agricultural/grazing pastures.

3.6 Biological Resources

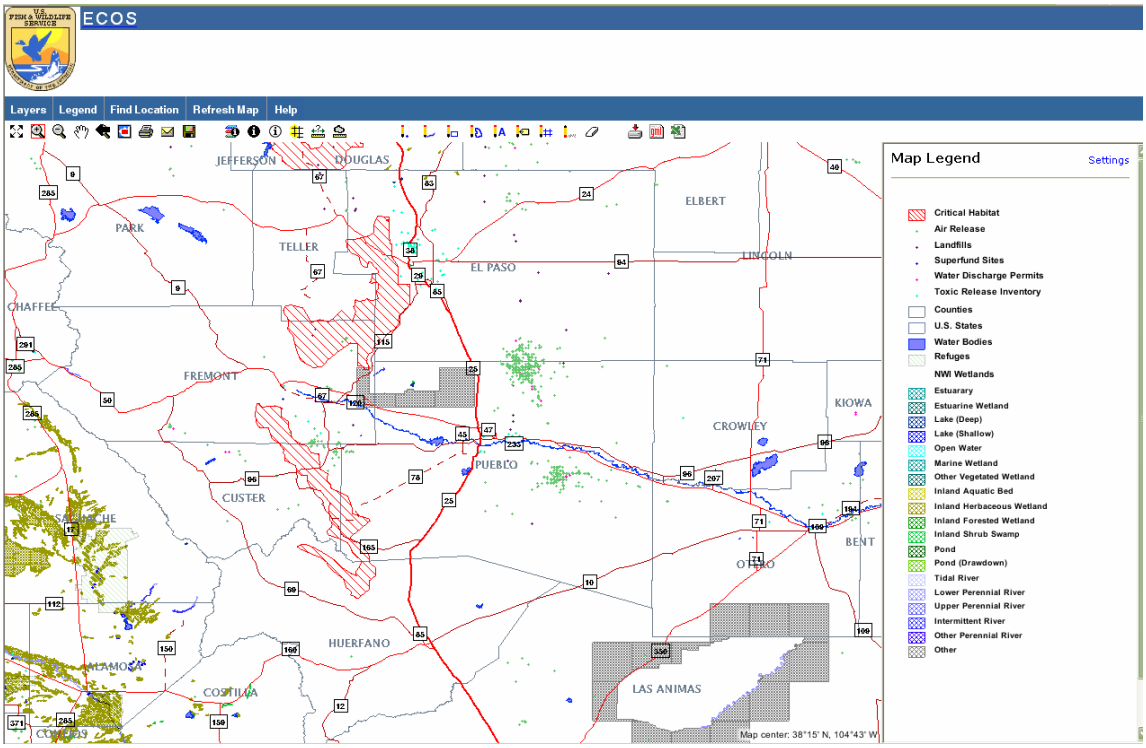
3.6.1 Vegetation

Pueblo Memorial Airport's Industrial Park is located in high-plains with a semi-arid climate. The vegetation is sparse.

3.6.2 Endangered, Threatened and Special Status Species

Pueblo Memorial Airport and Auxiliary airfield officials/owner were contacted regarding the presence of endangered, threatened, and proposed and candidate (ETPC) species. Additionally, the Colorado Field Office of the US Department of Interior Fish and Wildlife Service (COFWS) was contacted for more information regarding any potential endangered

species issues. The COFWS provided a county listing of ETPC species which indicated some endangered, threatened and candidate species are present in each county. (Apparent successful offeror proposal, page 87D). Specifically, the Canada Lynx and the Black-Footed Ferret are a species of concern. However, airport and airfield officials/owners have indicated that no known threatened or endangered species or habitat are present near or on the Pueblo Memorial Airport facility or auxiliary fields, including either the Canada Lynx or Black-Footed Ferret.



Source:US Fish and Wildlife Service's Environmental Conservation Online System (ECOS), http://ecos.fws.gov/

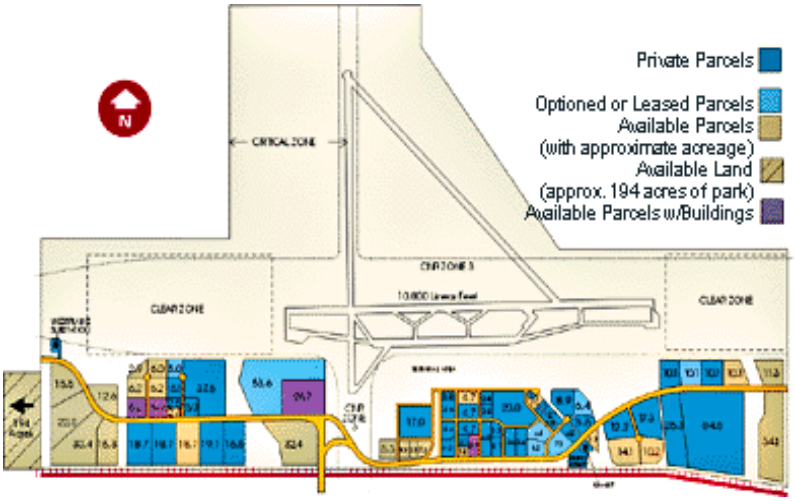
Fig 2 – US Fish & Wildlife Service ECOS Screen Shot

3.6.3 Wetlands / Floodplains

There are no wetlands present at the Pueblo Memorial Airport Industrial Park or auxiliary fields. Information obtained from the Federal Emergency Management Agency (FEMA) also shows that none of the proposed locations are in a floodplain. (Apparent successful offeror revised proposal, page 87D).

3.7 Land use

The areas east, west and north of the airport are zoned A-1 for agricultural. Avigation easements exist south of the airport throughout the industrial park with various businesses operating. Real estate easements are in place at Pueblo Memorial Airport on the east, west, and north sides of the airport. East and North side areas are agricultural grazing land with no existing housing or industrial areas and none reasonably foreseeable. All IFS activity is scheduled to occur from the west, north and east sides.



Source:PEDCO Web Site, http://www.pedco.org/index.php?page=Industrial#PAIP

Fig 3 – Pueblo Memorial Airport Industrial Park

The Fremont County Airport is situated in a semi-agricultural and rural area near Cañon City, CO. Regarding flying operations, Fremont County Airport has airspace easements in the east end on approach and departure. With exception of a federal prison located approximately 1 ½ miles west, the airport is surrounded by agricultural/grazing pastures.

Fowler Airfield is a private airfield, and it is located in a sparsely populated rural area.

Table 3-2 Existing Airport Land use

Existing Land-Use Affected by IFT Operations

Area	Land Uses	Potential Noise Impacted Areas
AIRPORTS		
Pueblo Memorial Airport	Primarily agricultural with manufacturing. One group of scattered residential south of the airport and adjacent to US 50.	None
Fremont County Airport	Primarily agricultural and is bordered by US 50 to the north and Hwy 67 to the west.	None
Fowler Airfield	Agricultural with two homes within the area.	Single Family Homes
FLIGHT PATHS		
Pueblo Memorial to Fremont County	Mostly open lands with the City of Pueblo, Lake Pueblo State Park, and other smaller cities.	Lake Pueblo State Park and Residences
Pueblo Memorial to Fowler	Mostly open lands with the Chemical Depot, some lakes/reservoirs, and scattered residences.	Scattered Residences
Fremont County to Fowler	Open lands, Lake Pueblo State Park, City of Pueblo, scattered homes, and other lakes.	Lake Pueblo State Park and Residences

Source:USAF IFT Preliminary Noise Impact Assessment, 22 July 2005

3.8 Transportation

Pueblo Memorial Airport is served by United Express Airline with two daily flights to and from Denver on weekdays and one daily flight on weekends. General aviation traffic accounts for 90% of Pueblo Memorial's air traffic to include 2% transit military traffic.

A Master Plan for the Fremont County Airport is currently in development, and the draft plan has noted that a potential operational transportation impact with regard to an increase in the volume of touch and go traffic. Currently the airport is designed to serve single and multi-engine

piston and turbo prop aircraft. However, several large corporations, including Wal-Mart, Hastings, and First Bank (utilizing jet aircraft) also currently use the airport.

As Fowler Field is a private airfield, it is currently not used for any public aircraft transportation. Current activity at the airfield includes the occasional crop duster and occasionally three to four smaller private recreational airplanes.

3.9 Historic / Cultural Resources

Historic properties, under 36 CFR Section 800, are defined as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in the National Register of Historic Places" (Advisory Council on Historic Preservation, 2004). The term "eligible for inclusion in the National Register" includes both listed and eligible properties that meet NRHP listing criteria as found in 36 CFR Part 60. Cultural resources include prehistoric and historic archaeological sites, buildings, structures, districts, artifacts, objects, or any other physical evidence of human activity considered important to a culture, subculture, or community for scientific, traditional, or religious purposes.

The apparent successful offeror has proposed Pueblo Memorial Airport as the main location, and 17 full-time military personnel as well as up to 1,700 TDY military personnel per year will be based out of that location. The subject property was vacant prairie land and property owned by the United States of America as part of the United States Army Air-Base in the area. In 1948, the USA, acting by and through the War Assets Administrator, conveyed the property to the City of Pueblo. In 1985, Sperry Corporation, a Delaware Corporation, purchased the property from the City of Pueblo. At this approximate time the present buildings located at 1 and 5 William White Boulevard were constructed. Between 1985 and 1995, Sperry continuing industrial manufacturing work, went through several name changes (Sperry, Unisys and Paramax). In 1995, Loral Corporation, a New York Corporation, purchased the properties from Unisys Corporation, a Delaware Corporation, successor in merger to Sperry Corporation. According to the Pueblo County Assessor's office, the current property owner is Loral Corporation.

This past year, Pueblo Memorial Airport requested a "blanket" cultural resource review of the entire industrial park. On 26 April 2005, the Colorado Historical Society concluded that no significant cultural sites were located within the Pueblo Memorial Airport Industrial Park. (see Appendix F). With regard to the other locations, due to the inherent nature of the touch and go only operation, no historic or cultural resources would be impacted at either of the auxiliary fields.

3.10 Utilities

3.10.1 Sanitary Sewer

The James R. DiIorio Water Reclamation Facility in Pueblo treats wastewater generated at the Pueblo Memorial Airport Industrial park. The capacity at Pueblo is 19 million gallons per day (MGD) and it currently operates at 11 MGD. Wastewater is reclaimed through natural processes, which are accelerated using electrical power and computer controlled equipment. The reclaimed water is discharged to the Arkansas River, where it supports a variety of beneficial uses including aquatic life and agricultural irrigation.

The Water Reclamation Facility takes various water samples from locations within the reclamation process, as well as environmental samples from the Arkansas River and Fountain Creek, and performs chemical testing to document water quality at each location. These tests make it possible to control the water reclamation process, and to determine whether the quality of reclaimed water discharged to the Arkansas River meets legal requirements.

3.10.2 Potable Water

Pueblo's water supply originates high in the Rocky Mountains above Leadville, Colorado. Water from these high mountain watersheds flows into canals, creeks and streams and eventually into the Arkansas River. Pueblo's supply is then diverted from the Arkansas River through intake structures located within Pueblo Reservoir and transferred via pipeline to the Whitlock Treatment Plant where it is treated and filtered. The finished water is pumped through a system of transmission mains to various storage tanks and adjoining pump stations throughout the city. Water is carried from these pump stations by a vast network of interconnecting pipes to the citizens and businesses of Pueblo. There are approximately 538 miles of water mains (including both transmission and distribution mains) in the system. The water distribution process continues 24 hours a day, 365 days a year.

Current facts:

- Customers at December 31, 2004: **38,448** Population served: **106,555**
- Average pumpage per day in 2003: **23.567 million gallons per day**
- All time record Peak Day: **62,930,000** on July 16th, 1997
- Treatment plant capacity: **84 million gallons per day**

3.10.3 Electricity / Natural Gas

At the Pueblo Memorial Airport's Industrial Park, electricity is provided by Aquila, Inc. and uninterruptible natural gas service is provided by Xcel Energy.

4. Environmental Consequences

IFS will provide ground training, and approximately 19 sorties and 25 hours of flight instruction (which includes final check-ride) to students in preparation for Specialized Undergraduate Pilot Training (SUPT). The apparent successful offeror has proposed to house the IFS operation at Pueblo Memorial Airport Industrial Park in Pueblo, Colorado as the main location with two auxiliary airports/airfields to support touch and go's. With Pueblo Memorial Airport as the main location, 17 full-time military personnel as well as up to 1700 TDY military personnel (phased in per year) will be based out of that location. The apparent successful offeror has proposed to complete an interior renovation of the currently existing 193,800 plus square foot two story former Industrial Park Sperry Tech-1 building. This entire facility will be renovated to ensure adequate lodging, food service, a fitness center, classrooms, flight rooms, and office space are available for Air Force personnel. Three hangers will also be constructed by the apparent successful offeror to provide access to the existing taxiway at Pueblo Memorial Airport.

4.1 Air Quality

Proposed Action

Facility construction and remodeling will be conducted by licensed contractors from the Pueblo, Colorado area and they will be held accountable for adherence to federal, state, and local environmental laws and construction practices. The proposed construction and operation of the aviation fuel tanks will need air permits. The apparent successful offeror will ensure any sub-contractors obtain the necessary air permits and tank registrations prior to commencement of construction/renovation.

Regarding the Fremont County Airport's location near the limits of an EPA State Implementation Plan (SIP) PM10 Maintenance Area, the apparent successful offeror contacted CDPHE regarding any special permitting requirements for aircraft emissions. Discussions between the apparent successful offeror and EPA Region 8 and the CDPHE have confirmed that no permitting will be required in Colorado for air emissions due to the contractor's flight operations. Aircraft operations data could be used by CDPHE during future updates of the State emissions inventory for either of the three airfield locations.

No Action Alternative

Under the No Action Alternative, baseline air quality conditions at all of these three airfields would remain the same. The USAF would continue to spread the flight instruction between 625 various civil aviation flight schools throughout the United States, which will result in dispersed air quality effects.

4.2 Water Resources

4.2.1 Surface Water

Proposed Action

The main IFS facility at Pueblo Memorial Airport has no wetlands. The location of the proposed construction and operation at the Pueblo Memorial Airport will have no effect on floodplains, wetlands, and watersheds. The only proposed construction expected as part of the IFS mobilization would be the construction of three hangers adjacent to the main facility, fuel tanks, a running trail, ball field and a ramp connecting to the existing taxiway. Any proposed construction above Colorado thresholds for area disturbed will be permitted if necessary.

Combined construction of the three hangers, running track, ball field and ramp to taxiway would require a storm water permit. During construction the contractor would use best management practices to ensure minimal stormwater impacts. The contractor would obtain the necessary permits. No construction is planned for the Fremont County airport or Fowler Field as a result of the proposed IFS program. Due to the lack of any construction activities, the proposed aircraft operations at the auxiliary fields will have no effect on floodplains.

The apparent successful offeror consulted with FEMA and has purchased and reviewed Environmental Data Resources (EDR) reports along with EPA watershed reports for all three airfields. Discussion with the Federal Emergency Management Agency (FEMA) has showed that none of the proposed locations are in a floodplain. (Apparent successful offeror revised proposal, page 87D).

No Action Alternative

Under the No Action Alternative, baseline surface water conditions at all three airfields would remain the same. The USAF would continue to spread the flight instruction between 625 various civil aviation flight schools throughout the United States, which will result in a continuation of dispersed water quality impacts.

4.3 Hazardous Materials and Wastes

Proposed Action

The contractor run IFS Program will generate small amounts of waste oils, fuels and solvents from IFS aircraft maintenance activities at the main factility. Solid wastes will also be generated, including general office waste, food wastes and aircraft tires. The apparent successful offeror will ship aircraft tires to the dealer for disposal or retreading. Waste fuel, grease, and oil will be stored in approved containers provided by their waste removal licensed waste disposal subcontractor (i.e. Safety Kleen) until they are picked up for disposal. Solid waste will be picked up by a licensed waste disposal firm to be transported to state approved landfills. A purchasing control program will be implemented to prevent addition of consumer products that would negatively impact the permitting classification of the facility, (i.e. purchasing parts washer solvents with flashpoints higher than 140^{o}F). Large quantities of tires will not be stored at the main facility to eliminate potential problems such as rodent infestation. Compliance will occur with all current state and federal regulations pertaining to used tire storage.

The apparent successful offeror will comply with all state and federal regulations to manage their hazardous and solid waste, as required by all tenants at the Pueblo Memorial Airport Industrial Park as well as the federal contract. The apparent successful offeror will follow recordkeeping, auditing, and inspection requirements for all permitted waste streams in accordance with corresponding regulations. A Spill Prevention Control and Countermeasures (SPCC) Plan will be prepared and implemented to include the current above ground storage tanks (AST's) located at the facility as well as any additional AST's that would be installed as a result of the IFS program. This plan will also include any liquid petroleum storage containers that are stored on site (i.e. 55-gallon drums). Part of the implementation of the SPCC Plan will include construction of engineering controls to prevent accidental releases of petroleum products to surface waters and best management practices to prevent such releases from occurring. The apparent successful offeror will implement a robust training and internal audit system as to ensure a continually improving environmental compliance and management system. Each employee will be trained in various environmental issues they will deal with on a daily basis and tested on those subjects. Additionally, periodic environmental audits will be conducted to ensure day-to-day responsible environmental management occurs.

With regard to the auxiliary fields/airports, no construction or aircraft maintenance activities are anticipated for the Fremont County airport or Fowler Field as a result of this proposed IFS program. Accordingly, no impacts to hazardous materials and waste are expected.

No Action Alternative

Under the No Action Alternative, baseline hazardous material and waste conditions at all three airfields would remain the same. The USAF would continue to spread the flight instruction between 625 various civil aviation flight schools throughout the United States, which will result in dispersed hazardous material and waste conditions at those various airports.

4.4 Noise / Nuisance

Proposed Action

The apparent successful offeror designated, as its specific aircraft, the Diamond DA20-C1. This aircraft is a single engine, piston driven aircraft with two seats, and has a takeoff noise level of around 72 dBA. Increase in flights will parallel IFS program growth. The IFS program current planned growth calls for training 350 students starting from the date of 1 October 2006 through 30 September 2007, to be followed by 1,100 students starting from the date of 1 October 2007 through 30 September 2008. This notional plan then goes upward to train 1300 students per year, up to a maximum of 1,700 starting from the date of 1 October 2008 and following through subsequent option years. The maximum estimated annual increase in propeller operations at each airfield are:

- Pueblo Memorial Airport = 98,090 annual operations (Takeoffs/Landings/TGOs)
- Fowler Field = 108,800 annual operations (TGOs)
- Fremont County Airport = 61,200 annual operations (TGOs)

IFS operations from the main facility are scheduled to occur during the daytime (approximately 10 hour days) and planned on weekdays only.

A preliminary noise impact assessment was conducted by the apparent successful offeror for this proposed IFS operation. This noise impact assessment included relevant data regarding aircraft type, number of operations, duration of operations, aircraft noise levels, etc. With regard to the main site location, Pueblo Memorial Airport has developed noise contours from a previous noise assessment. Most airport authorities consider areas within the 65 dBA DNL contour as an area to limit or restrict residential or other noise sensitive type developments. The recommended compatible land use is outside the 60 dBA DNL, thus this noise contour was used for all airport noise impact assessments. The 60 DNL (Year 2001) is approximately 2,500 feet from the sides of the runway and about 8,700 feet from the ends of the runway. The only residences in the area are southeast of the airport and just south of US Highway 50. These residences are approximately 3,000 feet outside the 60 dBA DNL. Even with the increase in the volume of aircraft as a result of this contractor operation, the 60 dBA DNL contour would not likely shift 3,000 feet. Provided that the contractor does not alter the IFS approach and departure flight paths for Pueblo Memorial Airport so as to occur directly over the residences, there will be no significant impacts to noise levels.

With regard to the first auxiliary field, Fowler Airfield has two potential residential receptors located near the airfield. However, both residences are owners of the private airport. One residence is expected to experience an increase in daytime noise levels, as aircraft activity moves from minimal to the estimated 180 touch and goes per day. The other residence is about 2,600 feet away and would notice an increase in the noise level during IFS operations, but should not exceed the zone (55-60 dBA L_{dn}, *Hankard Environmental, 22 July 2005*) where noise levels are typically considered suitable for residences. The president of the Fowler Airfield Association has stated in a letter to the apparent successful offeror dated 19 August 2004 they are aware of the magnitude and see no local conflicts to proposed operations.

With regard to the second auxiliary field, Fremont County Airport does not have any known residential or noise sensitive properties within 2,500 feet to the sides of the runways and 5,000 feet to the end of the runways. There does not appear to be any sensitive noise receptors within this area; hence, no significant noise impacts are anticipated. Fremont County Airport has airspace easements in the east end on approach and departure. With exception of a federal prison located approximately 1 ½ miles west, the airport is surrounded by agricultural/grazing pastures.

To address any possible noise/nuisance concerns which may arise in the community, the apparent successful offeror and their partners have committed to a robust and attainable community relations plan. The methods they will use are:

- Comment Forms
- Facility / Emergency Response Plan coordination meetings and briefings
- Establish a web site where the public can get updates and information
- Advertise availability of management personnel for public forums
- Comments will be investigated and, when necessary, corrections to procedures initiated.

Doss Aviation's Program Manager will answer all noise/nuisance comments received in writing.

No Action Alternative

Under the No Action Alternative, baseline noise/nuisance conditions at all three airfields would remain the same. The USAF would continue to spread the flight instruction between 625 various civil aviation flight schools throughout the United States, continuing to result in dispersed, yet notably cumulative, noise and nuisance effects at all airports/airfields used by the 625 flight schools. This no action alternative would continue to produce inconsistent and unsatisfactory aviator screening results for the USAF.

4.5 Biological Resources

4.5.1 Vegetation

Proposed Action

Pueblo Memorial Airport Industrial Park is currently developed for industrial use and has sparse vegetation. Minor disturbance of vegetation commonly found in urban areas will occur during construction of the three hangers and ramp. Minor disturbance of vegetation commonly found in urban areas will also occur as a result of construction of a running track, ball field and ramp to taxiway. No construction is planned at either auxiliary field. Due to the inherent nature of touch and goes, no effects are anticipated to occur to vegetation through utilization of the auxiliary fields.

No Action Alternative

Under the No Action Alternative, baseline conditions for vegetation would remain the same for all three locations. Vegetation commonly found in urban areas would not be disturbed. The USAF would continue to spread the flight instruction between 625 various civil aviation flight schools throughout the United States, continuing to result in little or no impact to vegetation at airports/airfields used by the 625 flight schools.

4.5.2 Endangered, Threatened and Special Status Species

Proposed Action

Pueblo Memorial Airport and Auxiliary airfield officials/owner were contacted regarding the presence of endangered, threatened, and proposed and candidate (ETPC) species. Additionally, the Colorado Field Office of the US Department of Interior Fish and Wildlife Service (COFWS) was contacted for more information regarding any potential endangered species issues. The COFWS provided a county listing of ETPC species which indicated some endangered, threatened and candidate species are present in each county. (Apparent successful offeror proposal, page 87D). Specifically, the Canada Lynx and the Black-Footed Ferret are a species of concern. However, airport and airfield officials/owners have indicated that no known threatened or endangered species or habitat are present near or on the Pueblo Memorial Airport facility or auxiliary fields, including either the Canada Lynx or Black-Footed Ferret. Neither of these species or critical habitat is present on or near the Pueblo Memorial Airport facility and no significant impacts are expected.

Due to the existing land use plan of industrial development at the industrial park, significant habitat modification has occurred to habitat by private entities, currently resulting in the lack of potentially suitable non-fragmented habitat for these species. This type of urban development, initiated and continued with the land-use plan has led to the fragmentation of any previously considered potentially suitable (non-critical) habitat. As a result of this environmental baseline, there is currently no reasonably foreseeable potential to significantly adversely affect either of these two species or their habitat.

With regard to the two auxiliary fields, neither airport owners has confirmed the presence of any endangered or threatened species. Additionally, the extent of the contractor operated IFS activity is touch and goes at the auxiliary fields only. No threatened or endangered species are currently present. No construction is planned at either auxiliary fields and no physical changes to existing habitat would occur.

No Action Alternative

Under the No Action Alternative, baseline conditions for endangered, threatened and special status species would remain the same. The USAF would continue to spread the flight instruction between 625 various civil aviation flight schools throughout the United States, continuing to result in little impact to endangered species at airports/airfields used by the 625 flight schools.

4.5.3 Wetlands / Floodplains

Proposed Action

As mentioned in chapter 3, there are no wetlands or floodplains identified which would be impacted by the proposed action at Pueblo Memorial Airport Industrial Park or either auxiliary airfield. With regard to the main location at the Pueblo Memorial Airport Industrial Park, the site of the main facility and all associated construction is located outside the 100 year as well as 500 year floodplains.

No Action Alternative

Under the No Action Alternative, baseline conditions would remain the same. The USAF would continue to spread the flight instruction between 625 various civil aviation flight schools throughout the United States, which would also result in no significant impact to wetlands or floodplains.

4.6 Land Use

Proposed Action

As noted earlier in this EA, the main facility will be located at the city-operated Pueblo Memorial Airport Industrial Park, six miles east of downtown Pueblo Colorado. This area is zoned for industrial use, specifically I-2 and I-3. The areas east, west and north of the airport are zoned A-1 for agricultural. Avigation easements exist south of the airport throughout the industrial park with various businesses operating. Real estate easements are in place at Pueblo Memorial Airport on the east, west, and north sides of the airport. East and North side areas are

agricultural grazing land with no existing housing or industrial areas and none reasonably foreseeable. All IFS activity is scheduled to occur from the west, north and east sides. Lake Pueblo State Park and its surrounding residential areas were never considered as part of Doss's operational IFS flight patterns flying in and out of Pueblo Municipal Airport. The closest flight pattern to the State Park is an East-West corridor (V-244) that routes aircraft four (4) miles north of the subject area at an altitude of 8,500 feet. There will never be any fly-over's of the State Park and applicable residential areas associated with this IFS contract.

With regard to the first auxiliary field, the Fremont County Airport is situated in a semi-agricultural and rural area near Cañon City, CO. Regarding flying operations, Fremont County Airport has airspace easements in the east end on approach and departure. Otherwise, the airport is surrounded by agricultural property and will not be adversely affected by IFS activities. With exception of a federal prison located approximately 1 ½ miles west, the airport is surrounded by agricultural/grazing pastures. With regard to the second auxiliary field, Fowler Airfield is a private airfield, and it is located in a sparsely populated rural area.
Fowler field is a privately owned and operated airport. The proposed action is consistent with the current land use plan and the surrounding land use will remain unchanged. Since the airport sits on 160 acres surrounded by open prairie used solely for cattle operations, no significant impacts to its current land use are expected.

No construction is planned for either the Fremont County airport or Fowler Field as a result of the proposed IFS program, and any effects would be both insignificant and consistent with the current land use plans.

No Action Alternative

Under the No Action Alternative, baseline land use conditions at all three airfields would remain the same. The USAF would continue to spread the flight instruction between 625 various civil aviation flight schools throughout the United States, which would still result in no significant impact to land use planning.

4.7 Transportation

Proposed Action

Currently, the volume of traffic now occurring by Pueblo Memorial Airport is a small percentage of the airport's capacity. The current Airfield Manager, Mr. Jerry Brienza, and the FAA Air Traffic Control Manager, Mr. James Kadrmas, have both indicated that the Pueblo Memorial Airport can easily handle the increase in air traffic associated with locating and growing the IFS program.

The Fremont County Airport is currently updating their Airport Layout Plan that will include an annual forecast of over 23,000 touch and go operations as a result of this USAF IFS program. These 23,000 operations are below the maximum levels stated in Section 3.1.3, and the levels are based on the anticipated training of approximately 1,300 students per year. Although an impact could occur to transportation, it is not anticipated to be significant.
Fowler field is a private airport used only for crop dusting and recreational private planes, and no adverse type of impacts to transportation is anticipated.

No Action Alternative

Under the No Action Alternative, baseline transportation conditions at all three airfields would remain the same. The USAF would continue to spread the flight instruction between 625 various civil aviation flight schools throughout the United States, which would continue to cumulatively impact transportation.

4.8 Historic / Cultural Resources

Proposed Action

As noted in Chapter 3 (and Appendix F), the Colorado Historical Society has noted there are no significant cultural sites located in the Pueblo Memorial Airport Industrial Park. Additionally, the level of action at the auxiliary airports/airfields consists of touch and goes only, and no impact to cultural or historic resources would occur.

No Action Alternative

Under the No Action Alternative, the baseline conditions at all three airfields would remain the same. The USAF would continue to spread the flight instruction between 625 various civil aviation flight schools throughout the United States, which would still result in no significant impact to cultural or historic resources.

4.9 Utilities (Sanitary Sewer, Potable Water and Electricity / Natural Gas)

Proposed Action

At the maximum training rate of 1,700 students per year, there could be as many as 220 students in residence at any given time at the main facility located at the Pueblo Memorial Airport Industrial Park. A total support staff of approximately 170 would be working as flight instructors, mechanics, food service, lodging and security, not including the 17 military personnel. Waste water generated by this IFS main facility, as with all other businesses located on the airport, would be discharged into the public sanitary sewer system and processed at the public sanitary sewer treatment plant. As noted in Chapter 3, the James R. DiIorio Water Reclamation Facility in Pueblo would treat wastewater generated at the Pueblo Memorial Airport Industrial park. There are no other anticipated wastewater streams associated with this proposed IFS program.

The DiLorio Facility capacity is 19 million gallons per day (MGD) and it currently operates at 11 MGD. The plant currently can treat up to 19 MGD of wastewater and receives only 11 MGD, leaving a freeboard of 8 MGD. The proposed training facility was previously used as a manufacturing plant and accommodated over 1,000 employees. There were no known malfunctions or disruptions of the sanitary sewer or water systems caused by these prior operations. The IFS Program would have no significant impact regarding wastewater. Regarding potable water, the Pueblo Board of Water Works currently serves a population of 106,555, including Pueblo Memorial Airport Industrial Park. The Board of Water Works has confirmed that they have the capacity to serve more than double the current capacity, at a level of 230,000 (including all commercial uses). The existing water supply system has the capacity to

absorb this additional load without modifying the existing facilities, and there would be no significant impact with regard to potable water.

Electricity use will increase very slightly. However, no significant impacts to utilities are expected.

No Action Alternative

Under the No Action Alternative, baseline utility conditions at all three airfields would remain the same. The USAF would continue to spread the flight instruction between 625 various civil aviation flight schools throughout the United States, which would still result dispersed and minor impact to water resources.

4.10 Cumulative Impacts

Cumulative impacts result from incremental impacts of proposed actions, when combined with other past, present, and reasonable foreseeable future actions in an area's region of influence. Cumulative impacts can result from minor, but collectively substantial actions undertaken over a period of time by various agencies (local, state, and federal) or individuals. In accordance with NEPA, a discussion of cumulative impacts is required.

Proposed Action

With regard to this proposed action, no significant cumulative effects are anticipated. Specifically, with regard to the main site location, the Pueblo Memorial Airport is expected to remain fairly constant in size for the foreseeable future. Industrial growth around the airpark will continue to be a city goal, although no major airport projects are scheduled to occur soon. The only major airfield project currently scheduled to occur during the next ten years is a runway overlay project scheduled to occur in 2007. Construction will take approximately 2-3 months. With regard to the two auxiliary airports, no other major projects or expansions of major touch and go operations are anticipated by local, state, federal, or private entities.

No Action Alternative

Under the No Action Alternative, the USAF would continue to spread the cumulative environmental effects of flight instruction training among 625 various civil aviation flight schools throughout the United States.

5. List of Preparers and Reviewers

This EA has been prepared under the direction of HQ AETC at Randolph AFB, Texas. Individuals who primarily contributed and those offices which reviewed the preparation of this document are listed below.

HQ AETC/A7C

John Chiaramonte Jr., P.E.
HQ AETC/A7CCF (Flying Training Engineering Branch)
Master of Military Operational Art & Science
B.S. Civil Engineering
Years of Experience: 12
(210) 652-8224

HQ AETC/A7CVI
Randolph AFB, TX

HQ AETC/CONS
Randolph AFB TX

HQ AETC/JA
Randolph AFB TX

HQ AETC/PA

6. Distribution List

This EA is being distributed to the following agencies:

Pueblo Area Council of Governments (PACOG)
ATTN: Bill Moore
Pueblo MPO/TPR, City of Pueblo
211 East D Street
Pueblo, CO 81003

Pueblo Economic Development Corporation (PEDCO)
ATTN: Jim Spaccamonti
301 N. Main Street • PO Box 1957
Pueblo, Colorado 81002
(719) 544-2000

City of Pueblo
City Manager - David Galli
1 City Hall Place
Pueblo, CO 81003
(719) 553-2655

City of Cañon City
City Administrator - Steven G. Rabe
128 Main Street
Cañon City, CO 81212
(719) 269-9011

City of Fowler
Ms. Cheryl Smith
114 E Cranston Ave
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Fowler, CO 81039

Federal Aviation Administration (EA Coordination for Airports)
Denver Airports District Office
ATTN: Cynthia Nelson
26805 East 68th Ave, Suite 224
Denver CO 80249
(303) 342-1265

Federal Aviation Administration
Western On Route & Oceanic Operations (ANM-520)
ATTN: Marina Landis
1601 Lind Ave SW
Renton WA 98055
Ms. Landis (425) 227-2511 / Ms. Holmes (425) 277-2533

FAA Air Force Representative, Northwest Mountain Region
ANM-900
1601 Lind Ave SW
Renton, WA 98055
(425) 227-2949

Fish & Wildlife (Wild & Scenic Rivers/Endangered Species)
U.S. Fish & Wildlife
Colorado Ecological Service Office – Denver Federal Center
PO Box 25486
Denver, CO 80225
Susan Linner (303) 236-4774

Historical Society (Historical & Cultural Res.)
Colorado Historical Society
ATTN: Georgianna Contiguglia
1300 Broadway
Denver, CO 80203-2137
(303) 866-4674

Tribal Historic Consultation
Colorado Commission of Indian Affairs
ATTN: Ernest House Jr.
130 State Capital
Denver, CO 80203

Tribes nearby Pueblo
Southern Ute Indian Tribe
ATTN: Chairman Clement Frost
357 Ouray Drive
P.O. Box 737
Ignacio, CO 81137

Ute Mountain Ute Tribe
Manual Heart, Acting Chairmen
P.O. Box JJ
Towoac, CO 81334

U.S. Army Corps of Engineers (Floodplains & Wetlands)
Southern Colorado Regulatory Office
720 North Main Street, Suite 300
Pueblo, CO 81003-3047
Van Truan (719) 543-6915

Colorado Division of Wildlife (Wildlife Protection Endangered Species) – Southeast Region
4255 Sinton Rd
Colorado Springs, CO 80907
Dan Trienzlow (719) 561-5300

7. References

32 CFR 989, USAF Environmental Impact Analysis Process (EAIP)

Airport Environmental Handbook, Order 5050.4A, October 8, 1985

Colorado Department of Public Health and Environment, Stormwater Fact Sheet – Construction, 6/05

Apparent Successful Offeror Introductory Flight Training (IFT) Proposal, 29 July 2005

Environmental Assessment for the Extension of Runway 11/29, Armstrong Consultants, Inc., Oct 2004

FAA Order 1050.1E, Environmental Impacts Policies and Procedures

FAA Order 7210.3U, Facility Operation and Administration, 16 Feb 2006

Final Environmental Impact Statement, Destruction of Chemical Munitions at Pueblo Chemical Depot, Colorado, March 2002

Pueblo 2005 Data Book, Pueblo Economic Development Corporation (PEDCO)

APPENDICES

APPENDIX A

INTERAGENCY AND INTERGOVERNMENTAL COORDINATION FOR ENVIRONMENTAL PLANNING CORRESPONDENCE RESPONSES

DENVER AIRPORTS DISTRICT OFFICE
26805 EAST 68TH AVENUE
DENVER, COLORADO 80249-6361
(303) 342-1265

FEDERAL AVIATION
ADMINISTRATION

April 20, 2006

John Chiaramonte, Jr.
HQAETC/A7CCF
266 F. Street West
Randolph AFB, TX 78150

Re: Comments on EA for IFS Program at the Pueblo Memorial Airport

Dear Mr. Chiaramonte,

We have reviewed the EA for the IFS program at the Pueblo Memorial Airport. The following comments are from the *Airports District Office* of the Federal Aviation Administration (FAA). Please note that other divisions within the FAA may have additional or different comments.

Page/Section	Comment
iv	You may want to include how the USAF is defining the 19 sorties in an appendix.
2a	Include the Pueblo Memorial Airport ALP drawing as an exhibit. Highlight the subject area. We suggest an 8.5 by 11 size paper for the exhibit so readers can see more detail.
4/Section 2.2.2	What were the "environmental subfactors" considered?
5/Section 3.1.1	Change second sentence to "Pueblo Memorial Airport has an Airport Reference Code Design Category of C-III/D-II. The airports' Design category "CIII/DII" accommodates aircraft with approach speeds in the range of 141-166 knots and wingspans in the range of 79 to 118 feet. However, aircraft in lower categories, such as the Diamond DA20-C1, can operate at the airport. The 7th sentence in the 2nd paragraph begins with It. Do you mean The Airport?
7/3.1.3	Please assure that the operations are consistent with latest materials presented to Federal Aviation Administration.
9/Section 3.4	Successful offeror would "properly manage" instead of "will be handling"
18/line 28	In second full paragraph, what "zone" are you referring to at the Fowler Airfield?
19	In first sentence, is the Program Manager with USAF or DOSS Aviation?
20	What real estate easements? We are not familiar with this term at the Pueblo Memorial Airport. Does this refer to zoning restrictions or real estate disclaimers?
23/Section 4.10	Please remove sentence "All paving work for the runway overlay

	project will be conducted at night and phased to allow continued operations." This statement is premature.
27	Please include FAA Order 1050.1E Environmental Impacts Policies and Procedures as a reference.
Appendix A	We recommend that you generate noise contours to confirm your noise assumptions especially for the ultimate build out and operations of this project. What measures will be taken to avoid Lake Pueblo State Park and residences?

Sincerely,

Cynthia Nelson

Cynthia Nelson
Environmental Planner

DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

Office of the Civil Engineer
Air Education and Training Command
266 F Street West
Randolph AFB TX 78150-4319

Ms. Cynthia Nelson
Federal Aviation Administration (EA Coordination for Airports)
Denver Airports District Office
26805 East 68th Ave, Suite 224
Denver CO 80249

Dear Ms. Nelson,

Attached please our Response to your comments in your letter dated 20 April 2006, Re: Comments on EA for IFS program at the Pueblo Memorial Airport. We have also provided your comments and our responses to our designated service provider candidate, Doss Aviation. We recommend that you work directly with Doss to resolve any concerns generated by your comments and our responses. Doss Aviation officials can be reached at (719) 570-9804.

Sincerely,

SALLY D. MACON, Colonel, USAF
Chief, Environmental Programs

ENCLOSURES

HQ AETC Response to FAA's comments letter dated 20 April 2006, Re: Comments on EA for IFS program at the Pueblo Memorial Airport.

Page/Section	Comment	HQ AETC Response
iv	You may want to include how the USAF is defining the 19 sorties in an appendix.	Agreed. Attached is the latest IFS syllabus and we will make this Appendix D in the Final EA.
2a	Include the Pueblo Memorial Airport ALP drawing as an exhibit. Highlight the subject area. We suggest an 8.5 by 11 size paper for the exhibit so readers can see more detail.	Agreed. Attached is the ALP for PUB with the subject area highlighted.
4/Section 2.2.2	What were the "environmental subfactors" considered?	The actual language from the request for proposals was "1. The Government will evaluate the offeror's proposed employee environmental training program for adequacy and attainability. 2. The plan is intended to ensure ongoing compliance with applicable environmental laws and regulations in the region where flight training will take place. 3. The Government will evaluate the offeror's plan for comprehensiveness and insight concerning effects that the flight training program will have on the area of operation. 4. The offeror's plan to mitigate the effects the IFT program may have on the proposed training location will be evaluated for reasonableness and attainability. 5. The plan will be evaluated to ensure it effectively addresses program start up as well as the planned growth period and sustainment efforts of the mature program. 6. The offeror's plan to develop a partnership with the surrounding community in the training location will be evaluated to ensure it is logical and will build a welcoming and supportive atmosphere for this important Air Force program.
5/Section 3.1.1	Change second sentence to "Pueblo Memorial Airport has an Airport Reference Code Design Category of C-III/D-II. The airports' Design category "CIII/DII"	Agreed and change made.

	accommodates aircraft with approach speeds in the range of 141-166 knots and wingspan in the range of 79-118 feet. However, aircraft in lower categories, such as the Diamond DA20-C1, can operate at the airport. The 7th sentence in the 2nd paragraph begins with It. Do you mean the Airport?	It does refer to the Airport, final EA will reflect that change.
7/3.1.3	Please assure that the operations are consistent with latest materials presented to Federal Aviation Administration.	Agreed. Section 3.1.3 has been updated to reflect the numbers Doss Aviation sent to the FAA.
9/Section 3.4	Successful offeror would "properly manage" instead of "will be handling"	Agreed. Successful offeror would properly manage hazardous materials and wastes as they perform this contract and final EA will reflect that change.
18/line 28	In second full paragraph, what "zone" are you referring to at the Fowler Airfield?	The zone referenced was taken from Appendix B – IFT Preliminary Noise Impact Assessment, Hankard Environmental, 22 July 2005. After discussions with them, they stated the "residential" zone referenced was typically between 55 - 60 dBA L_{dn}.
19	In first sentence, is the Program Manager with USAF or DOSS Aviation?	The "Doss" Program Manager will answer.. Final EA will reflect that clarification.
20	What real estate easements? We are not familiar with this term at the Pueblo Memorial Airport. Does this refer to zoning restrictions or real estate disclaimers?	Agreed. The contractor was referring to zoning restrictions. The areas east, west and north of PUB are zoned A-1 for agricultural. Avigation easements exist south of PUB throughout the Pueblo Memorial Airport Industrial Park. Final EA will reflect that clarification.
23/Section 4.10	Please remove sentence "All paving work for the runway overlay project will be conducted at night and phased to allow continued operations." This statement is premature.	Agreed and removed.
27	Please include FAA Order 1050.1E Environmental	Agreed and included.

	Impacts Policies and procedures as a reference.	
Appendix A	We recommend that you generate noise contours to confirm your noise assumptions especially for the ultimate build out and operations of this project. What measures will be taken to avoid Lake Pueblo State park and residences?	Noted. We have provided your comments to our designated service provider candidate, Doss Aviation. Please contact them to further address their confirmation of the noise assumptions. Starting in October of 2006, the USAF plans for two groups of 15 students before Christmas with 25 starting in January 2007. Lake Pueblo State Park and its surrounding residential areas were never considered as part of Doss's operational IFS flight patterns flying in and out of Pueblo Municipal Airport. The closest flight pattern to the State Park is an East-West corridor (V-244) that routes aircraft four (4) miles north of the subject area at an altitude of 8500 feet. We have provided your comments to our designated service provider candidate, Doss Aviation. Please contact them to further address their confirmation of their flight patterns.

Rec'd 24 April 06

COLORADO HISTORICAL SOCIETY

The Colorado History Museum 1300 Broadway Denver, Colorado 80203-2137

April 17, 2006

Sally Macon, Colonel, USAF
Environmental Programs
HQ AETC/A7CV
Randolph AFB, TX 78150-4319

Re: Draft Environmental Assessment for a Proposed Contractor Operate IFS. (CHS #47815)

Dear Colonel Macon,

Thank you for your correspondence dated received April 13, 2004 regarding the above-mentioned project.

We recommend that you coordinate your National Environmental Policy Act (NEPA) studies with the studies required under Section 106 of the National Historic Preservation Act. According to 36 CFR 800.8 of Section 106, "Federal agencies are encouraged to coordinate compliance with Section 106 and the procedures in this part with any steps taken to meet the requirements of the National Environmental Policy Act." Also, Section 110 of the National Historic Preservation Act states that Federal agencies should "coordinate with the earliest phases of any environmental review carried out under the National Environmental Policy Act."

The findings from the Section 106 studies can inform the NEPA studies, such as including mitigation measures identified under Section 106 into the NEPA decision document. Once we receive the Section 106 studies, we will be able to fully complete our reviews under both Section 106 and NEPA.

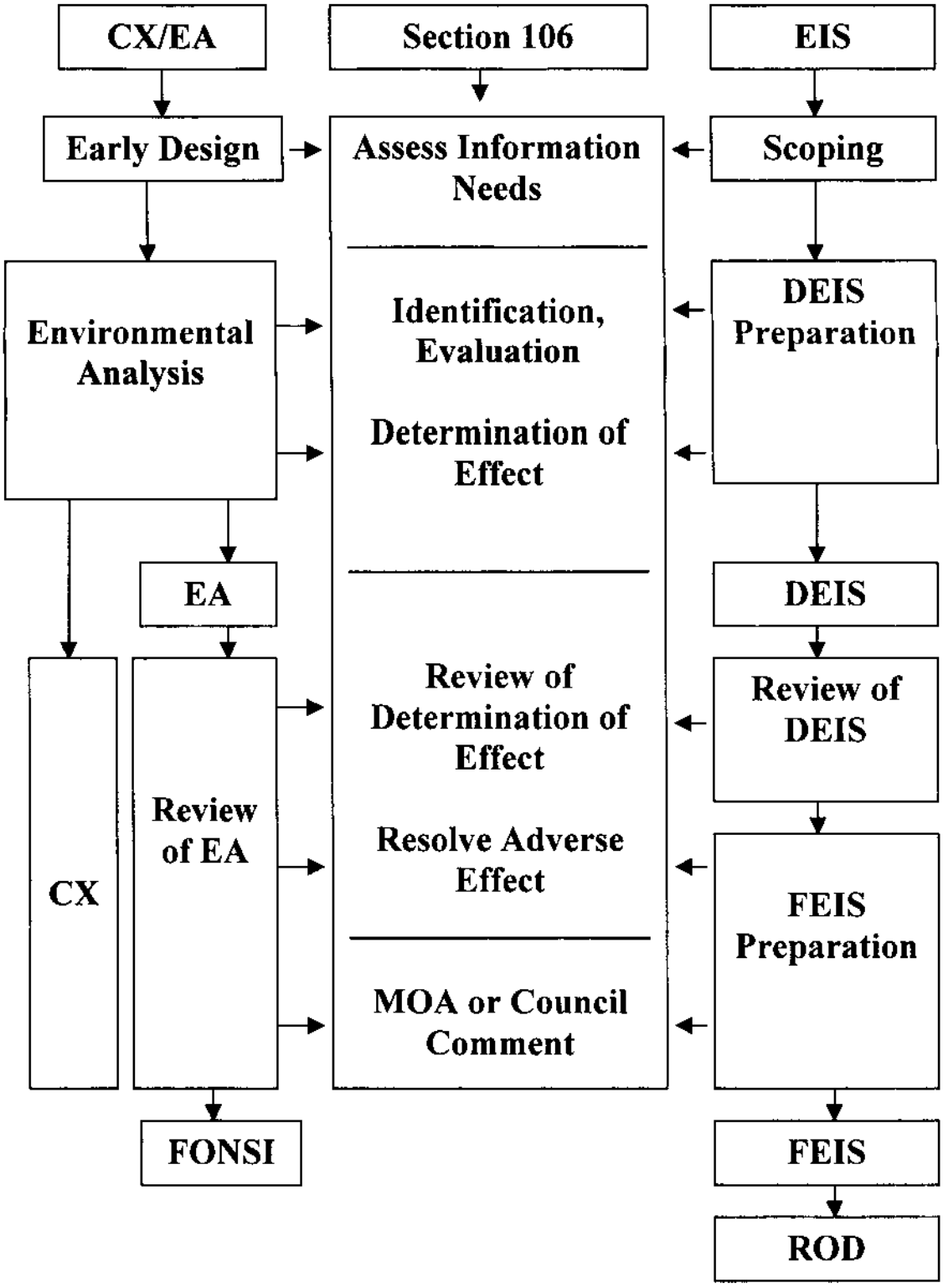
We have enclosed a flow chart that explains the coordination between Section 106 and NEPA. If we may be of further assistance, please contact Amy Pallante, our Section 106 Compliance Coordinator, at (303) 866-4678.

Sincerely,

for Georgianna Contiguglia
State Historic Preservation Officer

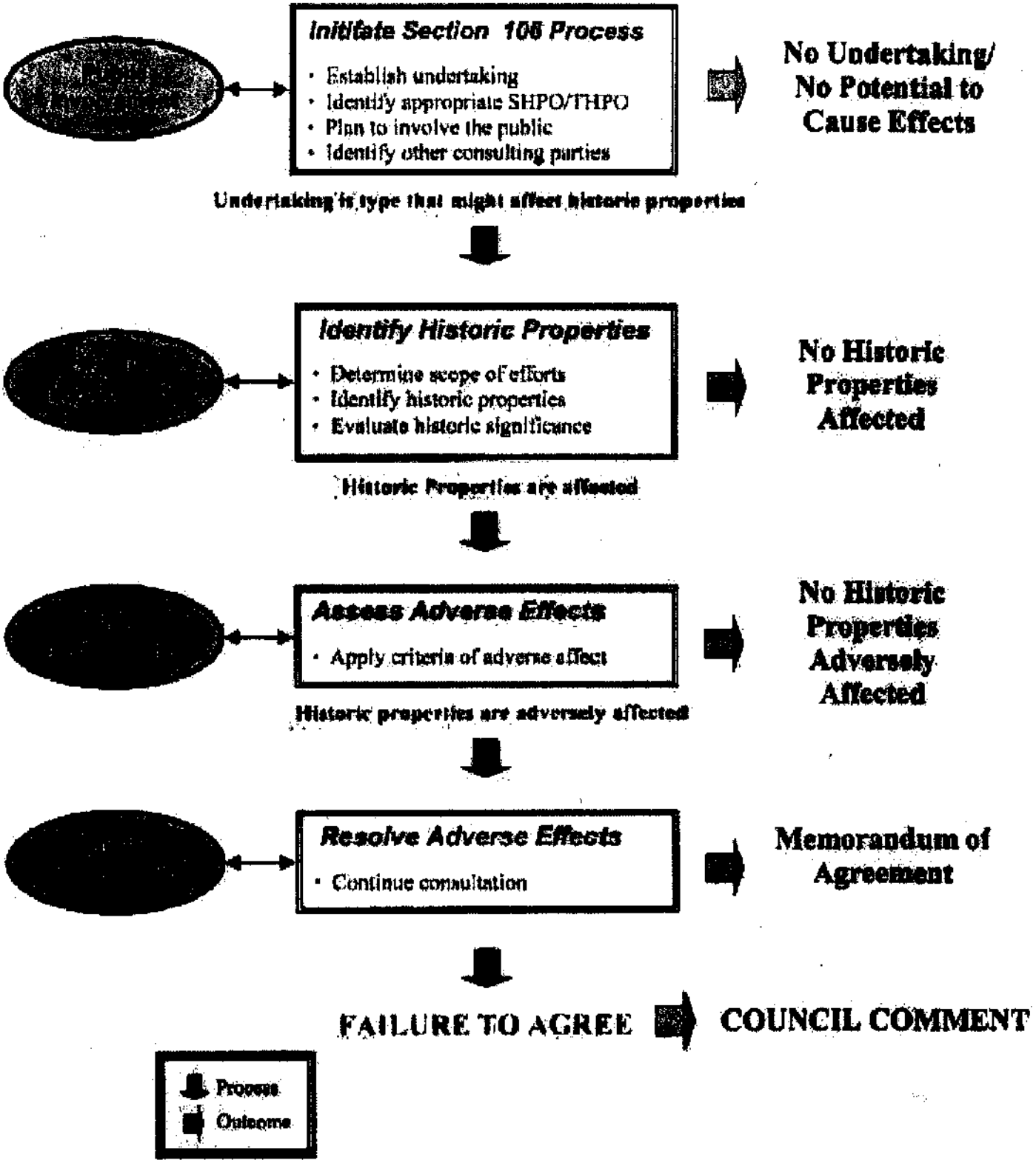
cc: John Chiaramonte, Jr./HQ AETC/A7CCF

COORDINATION BETWEEN NEPA AND SECTION 106



The Public and Consulting Parties must be notified and given the opportunity to comment during each step of the Section 106 review process.

THE SECTION 106 PROCESS



DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

Office of the Civil Engineer
Air Education and Training Command
266 F Street West
Randolph AFB TX 78150-4319

Ms. Georgianna Contiguglia
State Historic Preservation Officer
Colorado Historical Society
1300 Broadway
Denver CO 80203-2137

Dear Ms. Contiguglia,

This memorandum discusses your letter of April 17, 2006, Draft Environmental Assessment for a Proposed Contractor Operate IFS, (CHS #47815). We also bring your attention to your letter of April 26, 2005 addressed to Mr. Jerry Brienza, Pueblo Memorial Airport, re: Pueblo Memorial Airport Industrial Park - Sec 29 & 30, T20S, R63W: Sec 25 & 26, T20S, R64W (atch 1). This second letter identifies the fact that there are no significant resources in the area of potential effect.

The impacts of the Air Force's proposed action on the ground include the contractor's renovation of a building constructed in 1985, and their construction of three hangers in accordance with and with approval from Pueblo Memorial Airport. We understand that should unidentified archeological resources be discovered during construction, work must be interrupted until resources have been evaluated under 36 CFR 60.4 of the National Historic Preservation Action (NHPA). In accordance with Section 106 of the NHPA, we find that the proposed action has "no affect" to cultural resources. As such no further consultation is required per your April 26, 2005 letter to the Pueblo Memorial Airport.

If you or your staff has any questions, please do not hesitate to contact our POC, Ms. Deborah Tharp, (210) 652-7587.

Sincerely,

SALLY D. MACON, Colonel, USAF
Chief, Environmental Programs

ENCLOSURE

STATE OF COLORADO

Bill Owens, Governor
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WILDLIFE
AN EQUAL OPPORTUNITY EMPLOYER

Bruce McCloskey, Director
6060 Broadway
Denver, Colorado 80216
Telephone (303) 297-1192

For Wildlife-
For People

May 7, 2006

Southeast Region Office
4255 Sinton Road
Colorado Springs, CO. 80907

John Chiaramonte, Jr., PE
HQ AETC/A7CCF
266 F Street West
Randolph, TX 78150-4319

RE: Draft EA – IFS

Dear Mr. Chiaramonte, Jr.,

The Division of Wildlife has reviewed the Draft Environmental Assessment for a proposed contractor operated initial flight screening (IFS) program for the USAF. The proposed location, Pueblo Memorial Airport Industrial Park, is currently developed for industrial use and sparsely vegetated.

There are no endangered, threatened, or species of special concern currently inhabiting the site and no significant wildlife impacts are expected from the proposal.

If you have any additional questions regarding this letter, please contact District Wildlife Manager, Matt Martinez at the Pueblo Service Center of the Division of Wildlife. Mr. Martinez may be reached at (719) 561-5308.

Thank you for the opportunity to comment on this draft EA.

Sincerely,

Al Trujillo
Area Wildlife Manager

Recvd
15MAY06

DEPARTMENT OF THE ARMY
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS
SOUTHERN COLORADO REGULATORY OFFICE
720 NORTH MAIN STREET SUITE 300
PUEBLO CO 81003-3047

May 3, 2006

Operations Division
Regulatory Branch

John Chairamonte
Department of the Air Force
Air Education and Training Command
HQ AETC/A7CCF
266 F Street
Randolph AFB, TX 78150

Dear Mr. Chairamonte:

This replies to Ms. Sally Macon's, letter regarding the proposed Air Force training facility sites at the Pueblo, Fowler, and Fremont County Airports in southeastern Colorado. We have assigned Action No. 2006 00252 to this activity.

We have evaluated the information you provided and studied the project description, other records, and documents available to us. It appears that no waters of the United States are located within the project site. However, a site visit was not made and waters of the United States may be located on the site. The project is not regulated under the provisions of Section 404 of the Clean Water Act and a Department of the Army permit will not be required if there are no Corps of Engineers' jurisdictional waters on the site.

Our disclaimer of jurisdiction is only for Section 404 of the Federal Clean Water Act. Other Federal, state and local laws may apply to the activities. Therefore, the you should also contact other Federal, state and local regulatory authorities to determine whether the activities may require other authorizations or permits.

This letter contains an approved jurisdictional determination for the three airports. If you object to this determination, you may request an administrative appeal under Corps' regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the South Pacific Division Office at the following address:

Mr. Douglas R. Pomeroy
Division Review Office (ph (415)977 8035, fax (415)977-8047)
South Pacific Division
333 Market Street
San Francisco, CA 94105

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by July 1, 2006.

It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter.

This determination will be valid for 2 years from the date of this letter unless new information warrants revision of the determination within that time.

If you have any questions, please feel free to contact me at (719) 543-6915 or e-mail me at van.a.truan@usace.army.mil. For more information about the regulatory program, please see our web site at www.spa.usace.army.mil/reg.

Sincerely,

Van A. Truan
Chief, Southern Colorado
Regulatory Office

Enclosures

rcvd 4 May 06 JAK

Mr, John Chiaramonte, Jr. PE
HQ. AETC/A7CC
266 F Street West
Randolph AFB, TX
78150-4319

Dear Mr. Chiaramonte,

This is in response to your request for review and comment on the Draft Environmental Assessment for the USAF Flight Screening Program, to be conducted at Pueblo Memorial Airport.

The Fremont County Board of County Commissioners welcome the opportunity to actively participate in the USAF Flight Screening Program. Fremont County is residence to a large number of active duty USAF and Army personnel along with a sizeable military retiree population. Our military roots are deep and our ties to the military segment of our population are strong.

Our Fremont County Airport is located approximately 5 miles east of the City of Canon City and is governed by Fremont County. Our Airport Manager is Mr. Richard D. Baker, whom we have designated to be your point of contact on issues associated with the Flight Screening Program. He can be reached at 719-784-3816 or cell phone 719-429-3816. The address of the Fremont County Airport is: 60298 U.S. Highway 50, Penrose, Colorado, 81240.

We have reviewed your draft Environmental Assessment Document and concur with your conclusions. We would only emphasize your findings that aircraft noise would not be a factor to our airport surroundings and our Airport Layout Plan, in progress, would neither be an impact to your operations nor future expanded operations at Fremont County Airport.

Please contact Mr. Baker if you have further questions. We welcome the opportunity to participate in this vital program.

FREMONT COUNTY BOARD OF COUNTY COMMISSIONERS

REVIEW OF USAF DOCUMENT

RECOMMENDED ACTIONS

1. Document was mistakenly sent to Steve Rabe, City of Canon City. The requested suspense is 4 May, next Thursday. Suggest the Commissioners call the Point of Contact (POC): Mr. John Chiaramonte Jr, HQ AETC/A7CCF, 210-652-8224, and inform him that Fremont County Airport is governed by the Board of County Commissioners, who just recently received the document. A response will be provided, but we will not make the 4 May requested response deadline. We should have the response in his hands NLT 10 May. (A draft response is attached—it should go out on official letterhead).

2. Suggest the Commissioners appoint a Fremont County Point of Contact (POC) for USAF correspondence purposes. Suggest Dick Baker, Fremont County Airport Manager.

3. I understand that Armstrong Consultants are also reviewing this document. Suggest we expedite their review and obtain comments to incorporate into the official Fremont County response.

4. The USAF document doesn't address the existence of the Airport Industrial Park. I don't think there is an impact here—certainly not noise or any pollution issues. Should we inform them of the Airport Industrial Park? I don't think it's necessary, but others may disagree.

5. The Fremont County Airport Layout Plan should have no impact on the impending USAF activity. If anything, the extended runway and added ramp space south of the runway should be attractive to them for Cross-Country sorties.

6. No added or unique construction will be required at Fremont County Airport.

7. A flight briefing room can easily be provided if requested. This might be a nice touch for future USAF operations.

8. I see a potential impact with skydiving operations that occur during the week. I think we need to be prepared to move the skydiving landing zone south of the runway, even though that would require vehicles to cross the active runway at some point, either at the taxiway (preferably) or at the east

end prior to the overrun. Regardless of location, runway crossings will need to be controlled.

Dave Thomson
30 April, 2006

APPENDIX B

IFT PRELIMINARY NOISE IMPACT ASSESSMENT

HANKARD ENVIRONMENTAL
ACOUSTICS AND VIBRATION CONSULTING

July 22, 2005

Brandice Eslinger
All-Phase Environmental Consultants, Inc.
301 N. Main St. Suite 305
Pueblo, Colorado 81003

Re: USAF IFT Preliminary Noise Impact Assessment

Dear Ms. Eslinger,

This letter describes the review of the potential noise impacts due to the implementation of the United States Air Force (USAF) Introductory Flight Training (IFT) program. The IFT program will add training flights out of the Pueblo Memorial Airport and use both the Fremont County Airport and Fowler Airfield for touch-and-goes. The purpose of this review is to provide some insight as to the noise impact that this program would have on the surrounding land uses. The following provides an introduction, data used for this review, and the assessment.

SUMMARY

A preliminary noise impact assessment was conducted for the proposed IFT operations at Pueblo Memorial Airport, Fremont County Airport, and Fowler Airfield. Noise contours were not generated or refined for this analysis and all findings are based on a site visit, sample noise measurements, and available airport operational data. The basis for this analysis was to locate sensitive noise receptors in and around each airport and approximate the effect of the IFT operations on the known or approximated 60 dBA LDN (day-night noise level) contour.

For both Pueblo Memorial Airport and the Fremont County Airport it is felt that no noise impacts are likely due to the additional noise from IFT operations. Impacts were avoided because these airports appear to have enough buffer land (i.e.: undeveloped, agricultural, etc.) or noise sensitive receptors (i.e.: residences, parks, etc) were located far enough away from the airports. Fowler Airfield does have two residences in the vicinity (one located in close proximity to the airfield and the other about ½ mile away). It is felt that this nearest residence will be impacted by the noise, and the one about ½ mile away will not. Both of these residences will notice a significant increase in their noise level due to the existing ambient level being so low and the little to no current use of the airfield. Other noise concerns have to do with the flight paths between the airports. The IFT aircraft will likely be audible on the ground at most suburban and rural residences as well as Lake Pueblo State Park. It is felt that significant attention should be given to these flight paths to minimize complaints from the surrounding communities.

3536 JFK Parkway, Suite 2 • Fort Collins, Colorado 80525
phone: (303) 666-0617 • fax (303) 600-0282 • www.hankardinc.com

INTRODUCTION

The USAF plans to conduct its Introductory Flight Training (IFT) program out of the Pueblo Memorial Airport, located in Pueblo, Colorado. This flight training will include operations from this airport to both the Fremont County Airport to the west and the Fowler Airfield to the southeast. Figure 1 shows the general locations of these airports. The IFT will add approximately 270 daily operations to the Pueblo Memorial Airport. Both the Fremont County Airport and Fowler Airfield could see an increase of as much as 160 touch-and-goes per day. The aircraft proposed for these flights is the Diamond DA20-C1 which is a small two-bladed, four-cylinder, fixed gear aircraft with two seats. All operations will be on weekdays during daytime hours lasing about 10 hours per day.

FIGURE 1 – OVERVIEW OF IFT OPERATIONS AREA

EXISTING AND PROPOSED OPERATIONAL INFORMATION

To complete this assessment, information regarding both the existing and proposed conditions was gathered. For existing conditions, a field visit was made to each airport (July 2005) to collect surrounding land use information and measure ambient noise levels. Ambient noise level measurements at Pueblo Memorial Airport were taken for about 24 hours, and shorter duration samples (< 1 hour) were taken at all other sites. Table 1 shows the existing airport statistics. Table 2 describes the existing land-use around each of these airports.

Table 1
Existing Airport Statistics - 2005

Statistic	Pueblo Memorial Airport	Fremont County Airport	Fowler Airfield
Type of Airport	Public	Public	Private
Airport Accessibility	24-hrs	24-hrs	Dawn to Dusk
Average Airport Operations*	62% GA 32% MIL 6% AIR TAXI >1% COMM	83% GA 11% MIL 6% AIR TAXI	100% GA
Daily Aircraft Operations	250	40	negligible
Ambient Noise Level**	53 dBA	53 dBA	30 to 40 dBA

* Approximated from AirNav.com and/or site visit.

** Daytime samples near airport

For the proposed conditions, data was gathered from All-Phase Environmental Consultants and Doss Aviation, which included aircraft type, number of operations, duration of operations, aircraft noise levels, etc. The proposed aircraft is a Diamond DA20-C1 which is a piston driven aircraft with two seats, and has a takeoff noise level of around 72 dBA. IFT operations will be during the daytime (10 hour day) on weekdays only. A total of 135 sorties (135 take-offs + 135 landings = 270 operations) per day from the Pueblo Memorial Airport are proposed. These sorties will include trips to the Fremont County Airport and/or Fowler Airfield. Only touch-and-goes are planned for these other two airports. A total of 160 touch-and-goes could be completed at each of these airports per day. All operations will be on weekdays during daytime hours lasing about 10 hours per day.

NOISE IMPACT ASSESSMENT FOR THE USAF IFT PROGRAM

There are two primary noise concerns with increasing aircraft operations at each of these three airports. The first is how it affects the existing land-use directly surrounding each airport. The second is how it affects the land-use between each of the three airports. There are a number of noise level metrics to objectively determine if a particular land use is considered to be impacted. These metrics include the day-night noise level (LDN), the sound exposure level (SEL), and the equivalent noise level (L_{eq}). For airports, the LDN is the most commonly used by airport authorities in determining official noise impacts. The other metrics are better for determining annoyance and are more subjective. The LDN was used for determining the likelihood of airport impacts, and the L_{eq} was used for the audibility of flyovers. Table 2 summarizes the airport and flight path land uses that could potentially be impacted by the IFT operations.

Table 2
Existing Land-Use Affected by IFT Operations

Area	Land Uses	Potential Noise Impacted Areas
AIRPORTS		
Pueblo Memorial Airport	Primarily agricultural with manufacturing. One group of scattered residential south of the airport and adjacent to US 50.	None
Fremont County Airport	Primarily agricultural and is bordered by US 50 to the north and Hwy 67 to the west.	None
Fowler Airfield	Agricultural with two homes within the area.	Single Family Homes
FLIGHT PATHS		
Pueblo Memorial to Fremont County	Mostly open lands with the City of Pueblo, Lake Pueblo State Park, and other smaller cities.	Lake Pueblo State Park and Residences
Pueblo Memorial to Fowler	Mostly open lands with the Chemical Depot, some lakes/reservoirs, and scattered residences.	Scattered Residences
Fremont County to Fowler	Open lands, Lake Pueblo State Park, City of Pueblo, scattered homes, and other lakes.	Lake Pueblo State Park and Residences

Surrounding Airport Land Use

For significant airports, noise contours are generally developed to describe how their daily operations affect the surrounding land uses. These contours generally relate to the particular day-night noise level (70 dBA DNL, 65 dBA DNL, and 60 dBA DNL), which is a 24 hour average noise level with a 10 dBA penalty assumed at night.

Pueblo Memorial Airport has developed these contours, and the other two smaller airports have not. Most airport authorities consider areas within the 65 dBA DNL contour as an area to limit or restrict residential or other noise sensitive type developments. Based on the "Pueblo Memorial Noise Contour Update" report completed around 1996, the recommended compatible land use is outside the 60 dBA LDN, thus this noise contour was used for all airport noise impact assessments. The 60 LDN (Year 2001) is approximately 2,500 feet from the sides of the runway and about 8,700 feet from the ends of the runway. At the time of this report, there were no impacted residences. Today (2005) there are approximately 250 daily operations, which are mostly General Aviation (GA) and Military. This operational level is very similar to the number of operations used to calculate the 2001 noise contours. Of these 250 operations, 62% are GA, which equates to 155 operations. The IFT is proposing to increase by about 270 daily GA operations or an increase of about 175%. This will shift the 60 dBA LDN outward, but to determine exactly how much would require to re-analyze the noise contours for the airport which is not a part of this analysis. Currently, the only residences in the area are southeast of the airport and just south of US 50. These residences are approximately 3,000 feet away from the 60 dBA LDN. Even with such a drastic increase in the GA operations at this airport, the 60 dBA LDN contour would not likely shift 3,000 feet. Additionally, these residences are in close proximity to US 50 which is typically their primary noise source rather than the airport. A sample noise measurement taken near these residences was at around 61 dBA. Provided that the IFT approach and departure flight paths for Pueblo Memorial Airport are not over these residences, there should not be any additional impacts due to noise.

Fremont County Airport has not developed any noise contours to help determine noise impacts. There are no known residential or noise sensitive properties within the immediate vicinity. Existing noise measurements near the airport showed the daytime noise level to be around 53 dBA, with most of the noise coming from nearby US 50. Currently, there are about 40 daily aircraft operations and a high majority of them being GA. The IFT is proposing to increase this by as much as 160 daily operations or 400%. Though this is a substantial increase, it is likely that a 60 dBA LDN noise contour would not extend beyond 2,500 feet to the sides of the runways and 5,000 feet to the ends of the runways. We are not aware of any sensitive noise receptors within this area, thus no noise impacts would be expected.

Fowler Airfield also has not developed any noise contours, but this is a small private airstrip that currently has little to no traffic. There are two residential receptors located near the airfield. One is located in very close proximity to the airfield and the other is about ½ mile (2,600 feet) to the north. Existing daytime noise levels near the airport vary between 30 dBA and 40 dBA depending on if there is a vehicle traveling down the adjacent roadway. Due to the areas being so quiet today, the addition of 160 IFT daily operations will have a noticeable effect

to the noise level in the area. Similar to the Fremont County Airport, the 60 dBA LDN noise contour would not likely extend beyond about 2,500 feet along the sides of the runways, and 5,000 feet from the ends of the runways. As previously mentioned, there are only two residences within the area, and only the one located in close proximity to the airfield would be considered impacted by noise. The other residence is about 2,600 feet away, and will notice an increase in the noise level during IFT operations, but should be within a zone where noise levels are typically considered suitable for residences.

Surrounding Flight Path Land Use

The flight paths for the proposed IFT operations were not available for this analysis. Thus, general flight paths (direct and in-direct) between each of the airports were assumed. There are no typical methods to objectively determine a noise impact for flyover that are beyond an airport area, but noise complaints from routine aircraft flyovers are common. Thus, it is the intent of this section to outline the general land uses between these airports that are the most sensitive to noise to help with planning of the flight paths.

It was found that the most sensitive noise receptors would include Lake Pueblo State Park, suburban residential neighborhoods in and around Pueblo, and scattered residences near the airports. Noise levels within these areas were not measured for this analysis. Typically during the daytime, the ambient noise level within a park noise level will be around 45 dBA, suburban residential noise levels around 55 dBA, and rural residential noise levels around 40 dBA. As the proposed IFT aircraft (Diamond DA20-C1) is typical of other small propeller driven aircraft with regard to noise level, flying over these areas at a typical short distance cruising altitude (i.e.: 4,000 feet) will probably generate around 70 dBA on the ground. Thus, these aircraft will be audible within all of these areas and care should be taken to avoid these areas and/or minimize the number of aircraft flyovers in one area by alternating flight paths.

Please feel free to call me at (303) 666-0617 if you have any questions or if I can be of any further assistance.

Sincerely,

Jeff Cerjan
Senior Engineer/Colorado Office Manager
Hankard Environmental Inc.

APPENDIX C

COLORADO HISTORICAL SOCIETY REVIEW OF PUEBLO MEMORIAL AIRPORT INDUSTRIAL PARK, 26 APRIL 2005

COLORADO
HISTORICAL
SOCIETY

The Colorado History Museum 1300 Broadway Denver, Colorado 80203-2137

April 26, 2005

Jerry Brienza
Pueblo Memorial Airport
31201 Bryan Circle
Pueblo, CO 81001

Re: Pueblo Memorial Airport Industrial Park - Sec. 29 & 30, T20S, R63W
Sec. 25 & 26, T20S, R64W

Dear Mr. Brienza:

This office has reviewed the information provided in your April 25, 2005 correspondence concerning the project listed above.

A search of our files has indicated that there are no significant cultural resource sites located within the area of potential effect. Based on the information supplied, we believe that the present nature of the proposed project area is such that no further cultural resource work is necessary. The project may proceed without further consultation with our office.

If unidentified archaeological resources are discovered during construction, work must be interrupted until the resources have been evaluated in terms of the National Register criteria, 36 CFR 60.4, in consultation with this office.

Thank you for the opportunity to comment on this project. If we may be of further assistance, please contact Jim Green at (303) 866-4674.

Sincerely,

Georgianna Contiguglia
State Historic Preservation Officer

GC/WJG

Daniel E. Centa
Director of Public Works/Aviation

Jerry Brienza
Airport Manager of Operations & Maintenance

PUEBLO MEMORIAL AIRPORT

31201 Bryan Circle
Pueblo, Colorado 81001

Phone (719) 553-2760
Fax (719) 553-2761

25 April 2005

Jim Green
Colorado Historical Society
Office of Archeology and Historic Preservation
225 E. 16th Ave., Suite 950
Denver, CO 80203

Re: Pueblo Memorial Airport Industrial Park

Dear Mr. Green:

In accordance with the FAA Environmental Checklist, Revision #3, Section "Cultural Resources", the City of Pueblo is required to consult with the Colorado Historical Society prior to any FAA land release to see if the State Historic Preservation Officer believes that significant architectural, prehistoric, historic, archeological, or paleontological resources may be lost or destroyed as a result of the project; or if there is Native American tribal interest in the project; or if the proposed project will impact properties in or eligible for inclusion in the National Register of Historic Places.

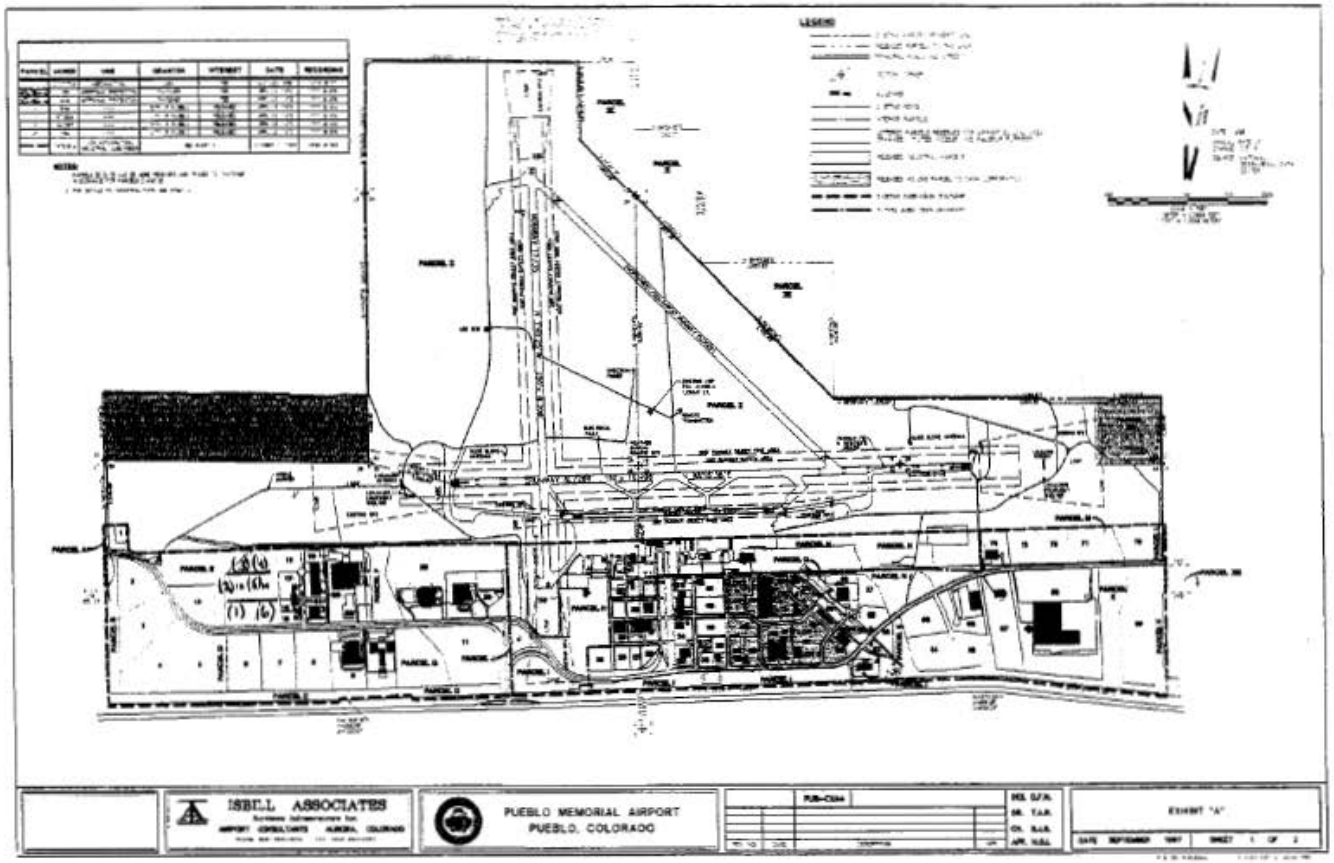
Most of the land in the Airport Industrial Park Subdivision is flat and prepared for development. The land has been zoned industrial and much of the Park is already developed and occupied. Maps of both the Airport Industrial Park and its Subdivision are enclosed for your review. Parcels 13 and 14 have since been further subdivided, via Filing #3, into Lots 1 (through) 6. There are currently buildings situated on Lots 1 (and) 6, the south portion of the Parcels. The Pueblo Development Foundation (PDF) is seeking to erect two (2) "shell" buildings directly to the north on Lots 2 and 5.

We are hoping that you can provide us with a "blanket" review of the entire Industrial Park instead of the City requesting a review for each lot. This would greatly expedite any future FAA land releases requested by the City.

If you have any further questions, please feel free to contact me at 719-553-2760.

Sincerely,

Jerry Brienza
Pueblo Memorial Airport

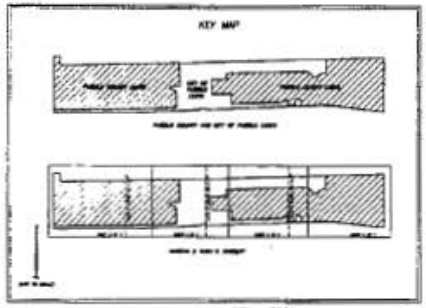

ISELL ASSOCIATES
PUEBLO MEMORIAL AIRPORT
PUEBLO, COLORADO
EXHIBIT "A"

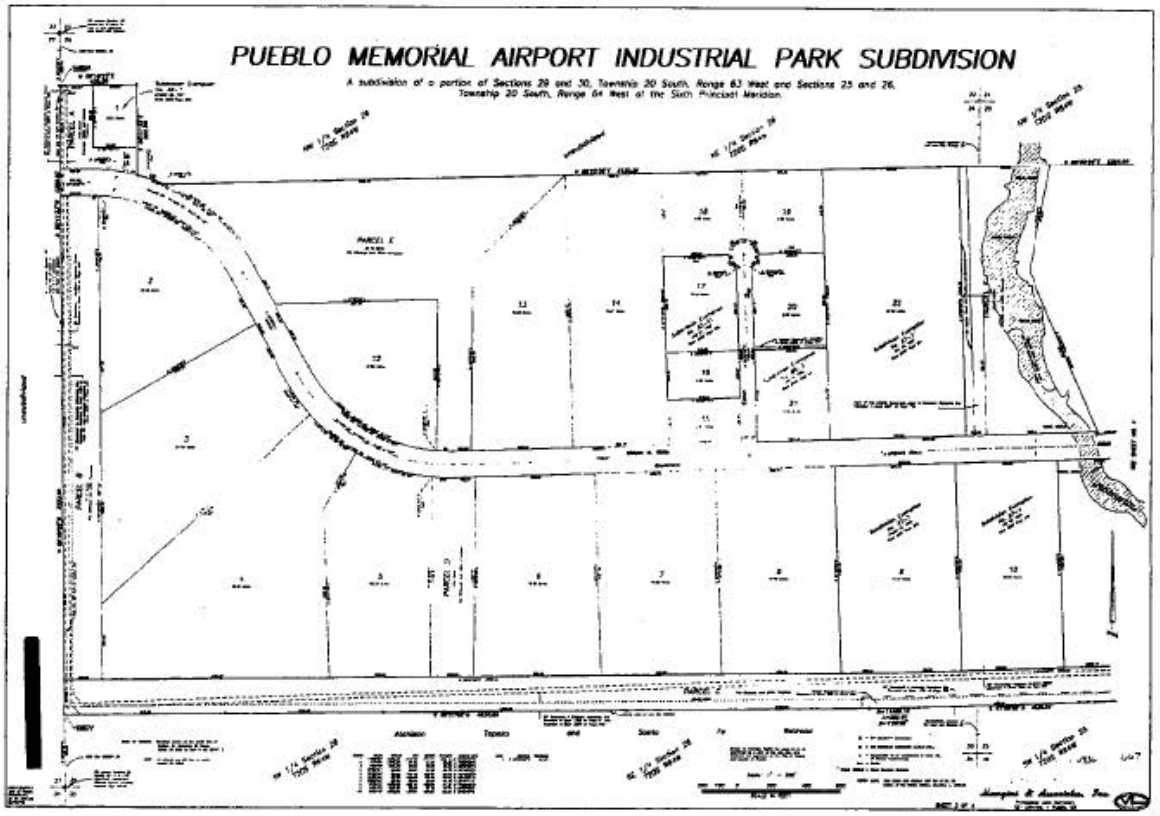
PUEBLO MEMORIAL AIRPORT INDUSTRIAL PARK SUBDIVISION

A subdivision of a portion of Sections 29 and 30, Township 20 South, Range 63 West and Sections 25 and 26, Township 20 South, Range 64 West of the Sixth Principal Meridian.

PUEBLO MEMORIAL AIRPORT INDUSTRIAL PARK SUBDIVISION

A subdivision of a portion of Sections 29 and 30, Township 20 South, Range 63 West and Sections 25 and 26, Township 20 South, Range 64 West of the Sixth Principal Meridian.

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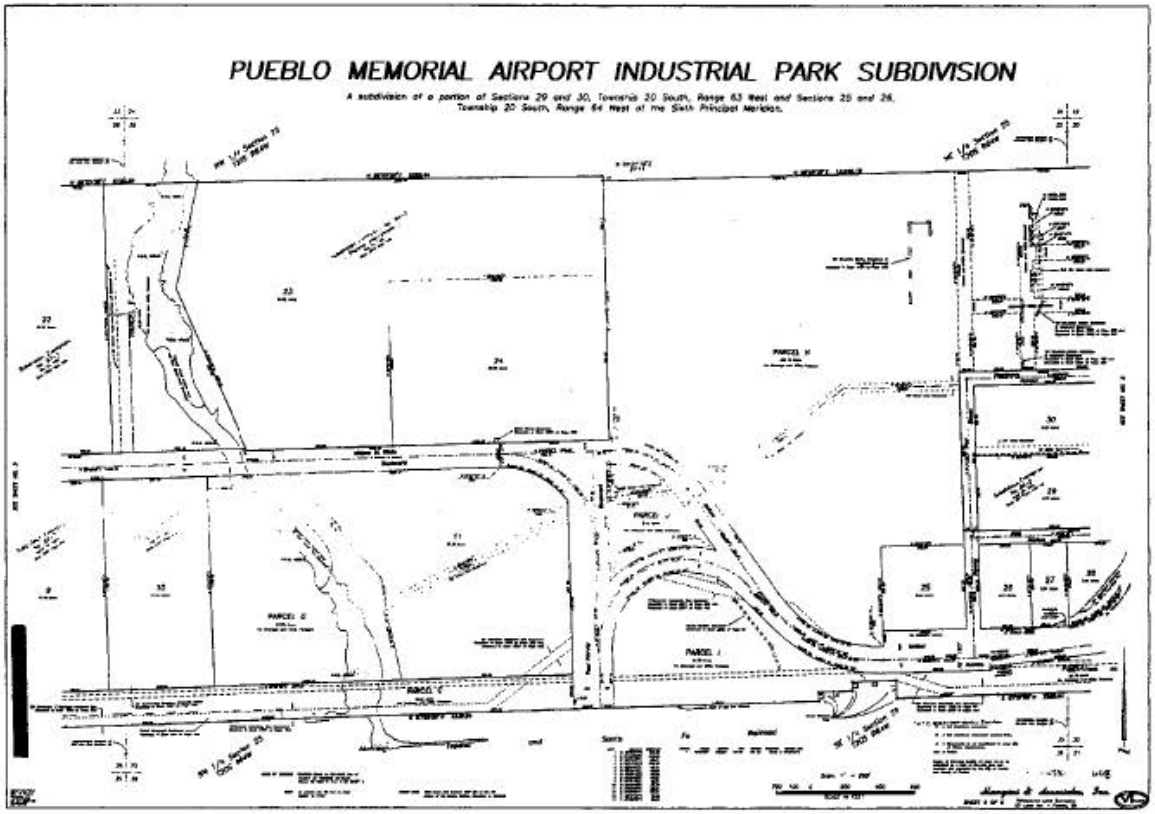
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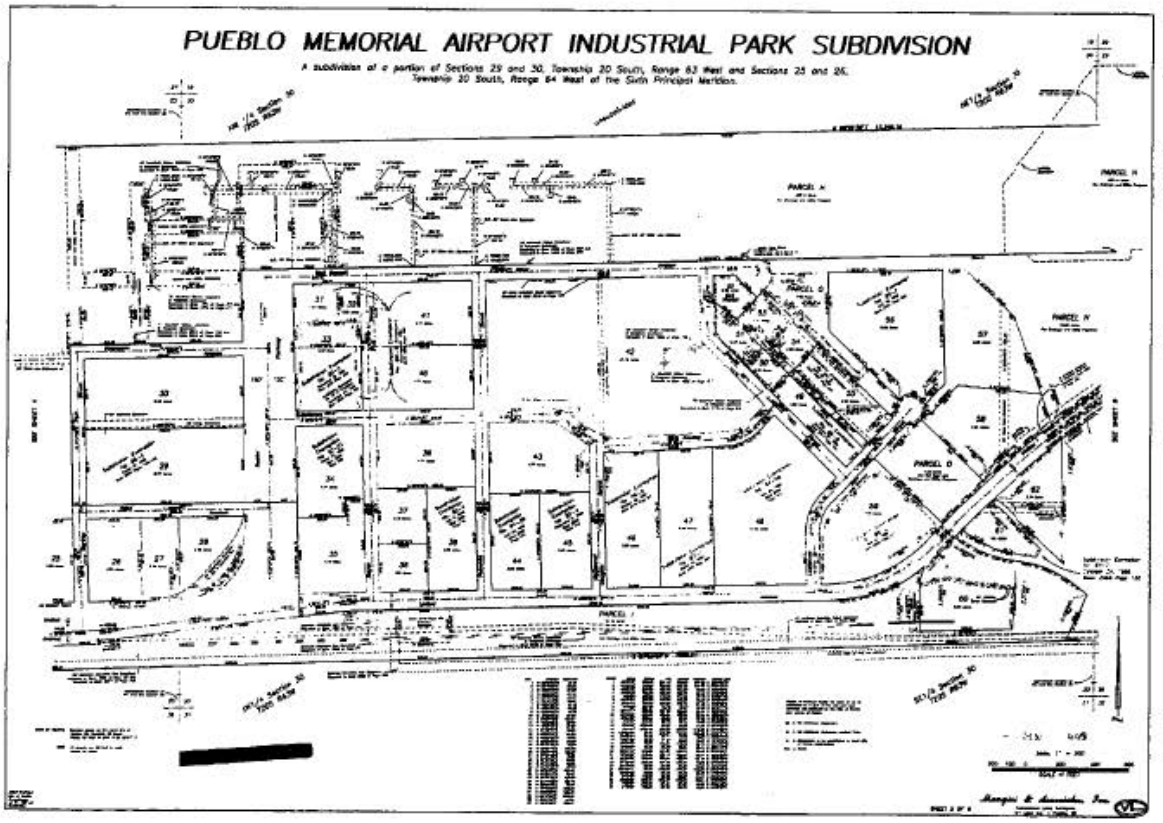
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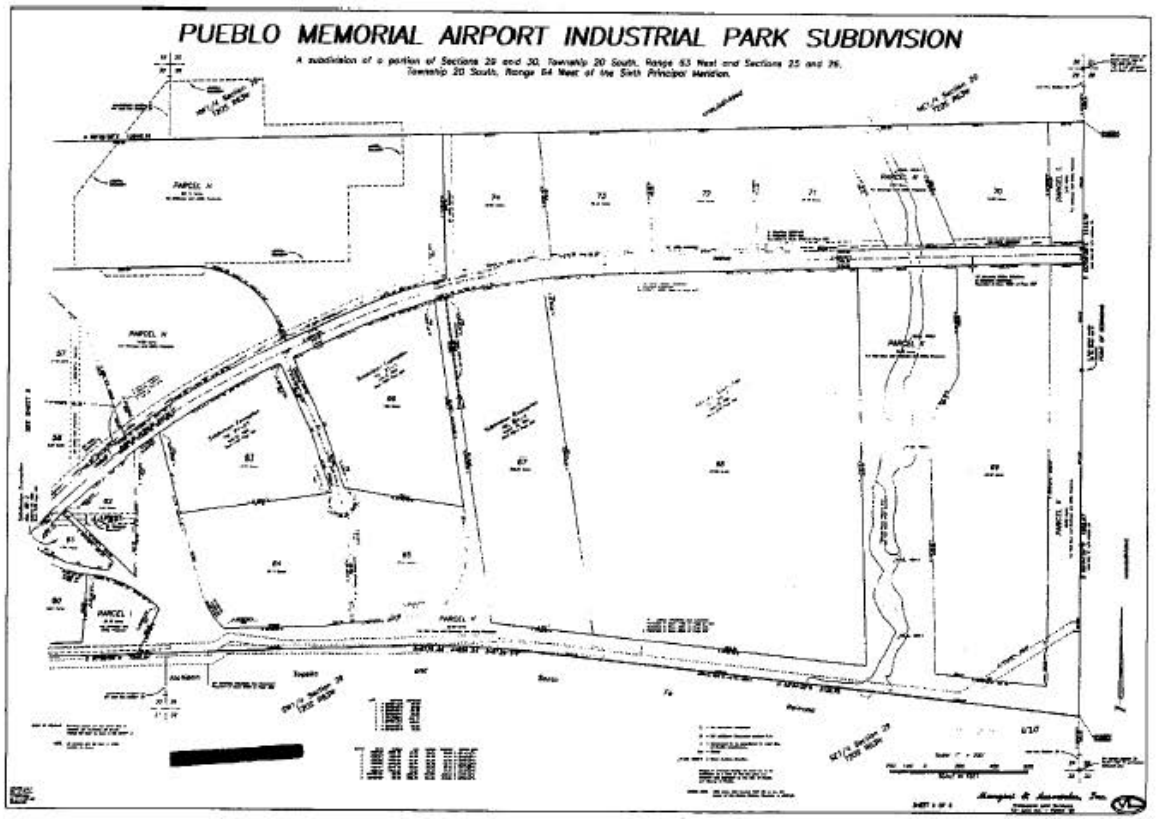
PUEBLO MEMORIAL AIRPORT INDUSTRIAL PARK SUBDIVISION
A subdivision of a portion of Sections 29 and 30, Township 20 South, Range 63 West and Sections 25 and 26, Township 20 South, Range 64 West of the Sixth Principal Meridian.

APPENDIX D

DRAFT IFS SYLLABUS, JUNE 2006

Flying Training

Initial Flight Screening

June 2006

Air Education and Training Command

DEPARTMENT OF THE AIR FORCE
Headquarters Air Education and Training Command
Randolph AFB TX 78150-4325

AETC Syllabus S-V8A-S

June 2006

This syllabus outlines the training required to achieve the proficiency specified in the course training standards. It prescribes the course content, instructions to conduct the training, and the approximate time necessary to successfully complete all requirements. Any training not specifically authorized in this syllabus or other AETC directives is prohibited without prior approval of this headquarters. Forward suggestions to HQ AETC/A3FI, 1 F STREET STE 2, RANDOLPH AFB TX 78150-4325. The next planned revision is June 2008.

OFFICIAL

GILMARY M. HOSTAGE III
Major General, USAF
Director of Air, Space, and Information Operations

Pages: 24
OPR: HQ AETC/A3FI
POC: Mr. Wayne I. Mudge, DSN 487-9652
Certified by: Col Anthony A. Imondi
Editor: Mr. John P. Fosdick
DISTRIBUTION: X

AETC ACTIVITIES:
Randolph ..... EF
- AFSAT/FT 1
- AFSAT/SDS 1
- AETC/ A3FI 1
- AETC/ A3Z ..... EF
- AETC/FMA 1
- AETC/HO 2
- AETC/SEF 1
- AETC/SGT 1
- AETC/A5RF 1
- AETC/A5RR 1
- 19 AF/DOU/DOZ 1
- 12 OSS/OSTS ..... EF
  - 12 FTW/HO 2
  - 12 OG/OGV 2

14 OSS/OSTB, Columbus AFB MS 39710-4001 ..... EF
47 OSS/OSTD, Laughlin AFB TX 78843-5222 ..... EF
71 OSS/NW-BST, Vance AFB OK 73705-5202 ..... EF
80 OSS/DOQB, Sheppard AFB TX 76311-2056 2
97 AMW/DOT, Altus AFB OK 73523-5053 1
AUL/LTSC, Maxwell AFB AL 36112-6424 1
837 TRSS/SAC, Lackland AFB TX 78236-5609 1
OTHER ACTIVITIES:
HQ USAF/ A3OT, 1480 Air Force Pentagon, Washington DC 20330-1480 1
HQ AMC/ A37F, 402 Scott DR Unit 3A1, Scott AFB IL 62225-5302 1
306 OSS/OST, 9206 Airfield Dr Suite 1, USAF Academy CO 80840-6300 2
306 Det 1, Pueblo Municipal Airport Pueblo, CO 2
557 FTS, 9207 Airfield Dr USAF Academy CO 80840-6300 2
Office on Educational Credit for the American Council on Education, 1 Dupont Circle NW, Washington DC 20036 2
Department of the Navy, CNO/N889G1, Room 4E412 2000 Navy Pentagon, Washington DC 20350-2000 1
CNET/T-25, 250 Dallas St NAS Pensacola FL 32508-5220 1
CNATRA/N-3, 250 Lexington Blvd Ste 1 NAS Corpus Christi TX 78419-5041 2
CTW-1, 101 Fuller Rd Ste 250 NAS Meridian MS 39309-5403 3
CTW-2, 205 Mitscher Ave Ste 101 NAS Kingsville TX 78363-5008 3
CTW-4, 401 Bataan St Ste 101 NAS Corpus Christi TX 88419-5242 3
CTW-5, 7550 USS Essex St Ste 201 NAS Whiting Field, Milton FL 32570-6157 4
USCG Liaison Office, 280 Skyhawk Dr Ste B NAS Pensacola FL 32508-5525 1

Contents

Chapter 1

Course Description

1. Title — Initial Flight Screening (IFS)

2. Number — S-V8A-S

3. Objective — Screen, motivate, and prepare pilot, combat systems officer (CSO,) and remote-pilot candidates for entry into Undergraduate Flight Training (UFT). This training includes:

a. Flying training to teach the principles and techniques used in basic flying operations.

b. Ground training to supplement and reinforce flying training.

4. Location — Pueblo, Colorado

5. Duration — 5 days preflight, plus 25 flying training days.

6. Entry Prerequisites — Selected as a candidate for UFT and medically qualified (Federal Aviation Administration (FAA) Class III Medical Certificate and a USAF Flying Class 1/1A, as appropriate).

7. Status Upon Graduation — Commissioned officer graduates of this course are qualified to enter UFT

8. Flying Training — The times specified are actual mission times and do not include time for briefing or debriefing.

	Sorties/Approximate Hours
Dual Flying	17/23.3
Solo Flying*	2/1.7
Total	19/25.0

* Officers scheduled for Specialized Undergraduate Pilot Training (SUPT) and Undergraduate Remote-Pilot Training (URT) are required to solo. CSO candidates unable to solo may, if approved by the 306 FTG/CD to continue IFS, fly dual-only.

9. Ground Training Hours

a. ***Academic instruction***

	Hours
In-processing	2.0
Chief Instructor / Flight Scheduler Briefing	1.0
Local Area Procedures	2.0
Airplane Systems	1.5
Aerodynamic Principles	1.5
Airplane Performance	1.0
Flight Environment	6.0
Weather	1.0
Navigation	1.0
Written Examination	1.0
Total	18.0

b. ***Flightline instruction***

Pre/postflight preparation and procedures	2.0
Airport operations	1.0
Takeoffs, landings, and go-arounds	1.0
Slow flight and stalls	1.0
Ground reference maneuvers	1.0
Navigation	1.0
Basic instrument maneuvers	1.0
Emergency operations	1.0
Flying Safety/Operational Risk Management	1.0
Cockpit/Crew Resource Management	1.0
Presolo written examination	1.0
Total	12.0

c. ***Officer Development****

Orientation and Processing	7.0
Aircraft Mishap Prevention	1.0
Physical Training	20.0
Total	28.0

d. ***Total Ground Training*** 58.0

10. Total Course Hours (Flying and Ground) 83.0

Chapter 2

Course Administration

Section A — Syllabus Management

1. Syllabus Interpretation — This syllabus is directive and must be followed as written. If no clear syllabus guidance exists, resolve the situation using the appropriate chain of command. If the logical course of action appears to conflict with other directives, contact the OPR, HQ AETC/A3FI, DSN 487-9652.

2. Syllabus Waiver — An approved syllabus waiver is required for any *planned* exception to the syllabus caused by special or unusual circumstances. Permanent or blanket waivers are *not* authorized, but should be suggested as syllabus changes. Submit waiver requests electronically or in writing, on AETC IMT 6, *Waiver Request,* to the following approval authorities:

a. Syllabus waivers: 306 FTG/CD. 306 FTG provides 19 AF/DOZ and AETC/A3FI a copy of all waiver requests with the approval/denial outcomes annotated.

b. Syllabus entry prerequisite waivers: through 19 AF/DOZ and 19 AF/DO to HQ AETC/A3F.

Do not accomplish or omit any training requested in a waiver until notification of approval. Maintain a permanent record of all approved waivers in the students' training folders.

3. Syllabus Deviation — A syllabus deviation is any *unplanned* variation from syllabus requirements such as prerequisite flow, turn times, landing currency, or maneuver item file (MIF) requirements. Document *all* syllabus deviations in the student's training folder. All syllabus-directed training must be accomplished unless a waiver request or proficiency advancement is approved. If unforeseen circumstances result in an omission of required training, the 306 FTG/CD determines if the omitted training can be accomplished later in the syllabus flow without adversely affecting the quality of student training. Document 306 FTG/CD-directed corrective actions and the accomplishment of the omitted training in the student's training folder.

Section B — Training Management

1. Military Flight Commander Responsibilities

a. Supervise and monitor student training. Directly responsible for the day-to-day and overall training of each student under their supervision.

b. Assist students and flight instructors with the training review process and provide for discipline, physical and mental well-being, and general welfare of students. They must be aware of each student's progress in all areas, including the potential effect of external factors (personal problems, etc.). Flight commanders accomplish the following:

(1) Perform Student Counseling

(a) Counsel students when they are determined to be marginal performers or are placed on Commander's Awareness Program (CAP.) Conduct follow-up counseling as often thereafter as necessary.

(b) Counsel students as necessary on appropriate management issues, including personal problems and disciplinary matters. Refer students to appropriate base support agencies (Chaplain, Legal Office, etc.) for further assistance, if necessary.

(2) Maintain a training folder in accordance with local guidance, including:

(a) Instructor assignment.

(b) Documentation of any substandard performance (lessons graded Fair or Unsatisfactory).

(c) Placement on or removal from CAP.

(d) Record of formal counseling.

(e) Authorization of all additional training (AT) sorties.

(f) Record of performance on any progress check or AT sortie.

(g) Document any syllabus deviations or training waivers.

***Note* — Maintain sensitive personal information in a secure location.**

(3) Ensure proper management of:

(a) Training, including student processing.

(b) Physical Training (PT) program.

(4) Assist in syllabus-directed functions.

2. Training Requirements and Restrictions

a. *Training Practices* — The flight commander/leader and assigned instructor ensure overall maneuver continuity and currency throughout each unit.

b. *Average Hours/Events* — Students complete the course objectives with an average of 25.0 flying hours. Some students may require additional time due to break-in-training sorties, review sorties, unsatisfactory sorties at the end of a unit progress / elimination checks. Above average students (or students with prior flying experience) may require less flying time per unit or fewer sorties to prepare for the stage check or the final check. Individual sorties may be shortened if unit objectives are met, and the student may be proficiency advanced if performance dictates. As a minimum, students accomplish at least one sortie (meeting MIF requirements) in each training unit. The decision to proficiency advance a student at any point in training rests with the 306 Det 1/CC (or designated representative) and must be documented in the student's training folder.

c. *Maneuver Continuity* — As a guide, each optioned MIF item should be accomplished every third sortie. Give priority to "+" items followed by optioned but not "+"items. 306 Det 1 develops policies, practices, and review procedures to ensure students have proper maneuver currency and recency of experience and specifically evaluate these areas before authorizing solo missions. This does not apply to maneuvers specifically cited in unit training objectives to be accomplished once.

d. *Maximum Daily Student Flying Activities* — Deviations in the interest of student training may be approved by the contractor's Chief Pilot. Students do not normally exceed one sortie per day through C203 except to complete an incomplete sortie. Beginning with C301, students do not exceed two sorties per day (consider C501 and C502 as one activity). The Chief Pilot may approve a student to exceed one sortie per day prior to C203 based on the student's prior flying experience and ability. Document any deviations in the student's training folder.

e. *Minimum Total Hours* — No student may complete this program with less than 10.0 hours.

f. *Minimum Solo Hours* — The desired minimum total solo time is 1.5 hours. If a student successfully completes C502 and C60X (solo) and flies solo less than 1.5 hours, an additional solo sortie is not required. Document the shortage in the student's training folder. CSO candidates who do not solo and are continued in the program fly dual only. (Reference Syllabus Waiver, Section A, para 2 above.)

g. *Extracurricular Flying* — IFS students are prohibited from participating as a student in any flying training activity (soaring, jump, TACAV.)

h. *Sortie Lengths* — Sorties and approximate flying hours are listed below. Adhere to the approximate time per lesson as closely as possible for the average student.

Unit	***Sortie Time***	***Total Time***
C101	1.4	1.4
C201 – 03	1.4	4.2
C301 – 06	1.4	8.4

C490 (Stage Check)	1.4	1.4
C501	0.9	0.9
C502 (Solo)	0.5	0.5
C601 – 05	1.4 Dual / 1.2 Solo	6.8
C790 (Final Check)	1.4	1.4
	Total	25.0

3. Additional Training (AT) Sorties — AT sorties provide extra training to students in specific circumstances. Fly AT sorties in the current unit or the most recently completed unit and code for that unit. These sorties do not satisfy any maneuver requirements in any unit, but may be used to update or void landing currency. AT sorties are normally graded No Grade (NG), but may be graded Unsatisfactory (U) for safety of flight, flight discipline, or airsickness reasons (IAW AETCI 36-2205). (***Note* —** Following an AT sortie graded UNSAT, the student returns to the normal syllabus flow.) An AT sortie graded U does not count toward triggering a progress check (PC) or elimination check (EC), nor does an AT sortie graded NG break a string of unsatisfactory syllabus sorties. Do not document AT sorties as incomplete except when objectives are not met because of unusual circumstances. Procedures for allocation of AT sorties are contained in AETCI 36-2205.

a. *Break-in-Training Events —* The 306 Det 1/DO or the contractor's chief pilot (or designated representative) may authorize these sorties for extended delays in training. As a guide for aircraft, if a student has not flown for a minimum of 10 calendar days, the 306 Det 1/DO/chief pilot may authorize one X86 sortie for this type break in training. The 306 Det 1/DO/chief pilot may use this authority only when remaining syllabus sorties are insufficient to compensate for the student's break-in-training. Document as X86 sorties in the student's training folder. Additional AT sorties for the same break in training require 306 Det 1/CC approval and are annotated on AF IMT 4293.

b. *Total Syllabus Time —* AT sorties flown to meet minimum syllabus time are normally full mission profiles. Sorties flown to meet total time are dual. The contractor's Chief Pilot (or designated representative) or the 306 Det 1/DO may authorize these sorties when it becomes apparent they are needed. Students must meet end of unit MIF requirements for the most recently completed unit in which the AT was given. Code these sorties as X87.

c. *Reinstatement by Commander's Review —* Reference AETCI 36-2205, *Formal Aircrew Training Administration and Management*. Code sorties as a result of reinstatement as CX87.

4. Airsickness

a. Instructors ensure the flight commander and the squadron commander are aware of any students having airsickness problems. Refer students who experience airsickness to a flight surgeon/aero medical examiner/medical technician for examination, counseling, and appropriate treatment. Instructors document airsickness episodes in the student's training folder. Students hand-carry an AF IMT 4293 to the flight surgeon / aeromedical examiner / medical technician office.

b. Students who become airsick during any of the last four sorties (includes C501) preceding the initial solo must receive 306 Det 1/CC approval before flying the initial solo.

c. C501 may be flown as a full area profile with 306 Det 1/CC approval. This option should only be exercised in the event of airsickness on the preceding sortie.

d. Post solo airsickness results in an overall grade of Unsatisfactory.

5. Manifestation of Apprehension (MOA) — Although some slight anxiety or nervousness is common among students learning to fly, real fear of flying can interfere with judgment, decision making, and physical ability to control the aircraft. MOA may include passive or active airsickness, insomnia, loss of appetite, anxiety and tension related to the flying environment. When a student exhibits or admits to MOA symptoms that impair performance, document the situation in the student's training folder and refer the student to the flight surgeon/aero medical examiner/medical technician for evaluation.

6. Flying Safety — Emphasize aircraft mishap prevention training by recognizing, controlling, and correcting deficiencies in the student's judgment and skill. Stress flying safety throughout the course.

Present safety briefings once per week (minimum) to promote group discussions of the briefing topics and improve student attitudes associated with aircraft mishap prevention.

7. Emergency Procedures (EP) Training

a. Conduct EP training on all dual aircraft sorties to build the student's confidence in the aircraft. Conduct EP training during the mission briefing or debriefing for all flights, emphasizing proper application of procedures and realistic use of available publications. Attempt to correct procedural deficiencies by providing additional instruction and study assignments based on individual student needs.

b. Thoroughly brief simulated aircraft emergencies prior to flight.

c. Administer EP/aircraft operations limits exams bi-weekly (minimum.) Commanders may modify this requirement as necessary to meet training needs.

8. Student Standardization Program — Discuss standardization topics once per week (minimum) for each flying period as part of the mass briefing. Emphasize situational emergency procedures. Include overhead questioning and group discussion of topics appropriate to the student's stage of training.

9. Briefing Requirements — Briefings set the tone of the mission. Thoroughly brief all mission aspects with all aircrew members involved. Accomplish a post-mission briefing to measure the success of mission objectives.

10. Maneuver Demonstrations — Instructors demonstrate maneuvers prior to the student practicing them. Maneuvers not optioned by the MIF may not be demonstrated or practiced.

11. Unsatisfactory Performance

a. *Commander's Awareness Program (CAP)* **—** Refer to AETCI 36-2205 for guidance.

b. *Unsatisfactory Sortie Restrictions* **—** Following a sortie graded U overall, students progress to subsequent lessons in the same unit or repeat the last lesson of the unit, e.g., C306R. Following a solo sortie graded U, students progress to the next lesson.

c. *Unsatisfactory Ground Evaluations* **—** Post-solo students who demonstrate an unsatisfactory level of knowledge during standardization, emergency procedures briefings, or written exams may not perform syllabus-required sorties until demonstrating satisfactory performance in the applicable areas. As a minimum, this restriction includes one flying period devoted to directed study and reevaluation unless an intervening nonflying day occurs. The nonflying day may be used for directed study provided the students are notified. The squadron commander or operations officer may waive the one period grounding requirement. Document grounding and reduction of grounding period, if applicable, in the student's training folder.

d. *Unsatisfactory Academic Examination* **—** The minimum passing score on the academic test (G110) is 85 percent. Students who fail the academic examination receive extra instruction, emphasizing the student's weak area(s). Administer a written remake not earlier than one training day after the failed examination to allow the student the opportunity for additional self-study. Students who fail the academic examination may not continue further training until the failed examination is passed. Students who fail the academic examination a second time are entered in the commander's review process.

e. *Maximum Presolo Hours* **—** The flight commander should direct a progress check for pilot candidates who have not soloed after 20 hours of dual aircraft instruction, if the reason is poor performance/limited potential to complete SUPT or URT. If a student's last sortie was C306, a progress check must meet all the requirements listed in C490. Successful completion of the progress check is clearance to resume normal syllabus flow. If the student's last sortie was prior to C306, the student proceeds with normal syllabus flow after a successful progress check. Do not include hours for any type of incomplete lesson or 86 sortie when determining maximum presolo hours. However, all C87/88/89 aircraft sortie time is counted when determining maximum presolo hours.

f. *Progress Check (PC)* **—** Figure 2-1 shows a list of PC triggers. AT sorties are optional prior to a PC, but are not required. The 306 Det 1/CC may authorize each student up to two AT sorties before the

PC. These sorties are not automatically given to every student, but are reserved for cases when the 306 Det 1/CC feels some training irregularity or anomaly occurred and the student has demonstrated the potential to complete UFT. When assigning an overall grade, the PC pilot should consider the student's ability to complete the course within syllabus constraints as well as overall proficiency and situational awareness. The overall grade is NG or U. Document a PC as CX88 and include in the student's training folder. For progress checks successfully completed and flown as a result of the student not soloing in any unit, the PC pilot certifies the student is safe for solo and ensures the student is scheduled solo on the next syllabus sortie.

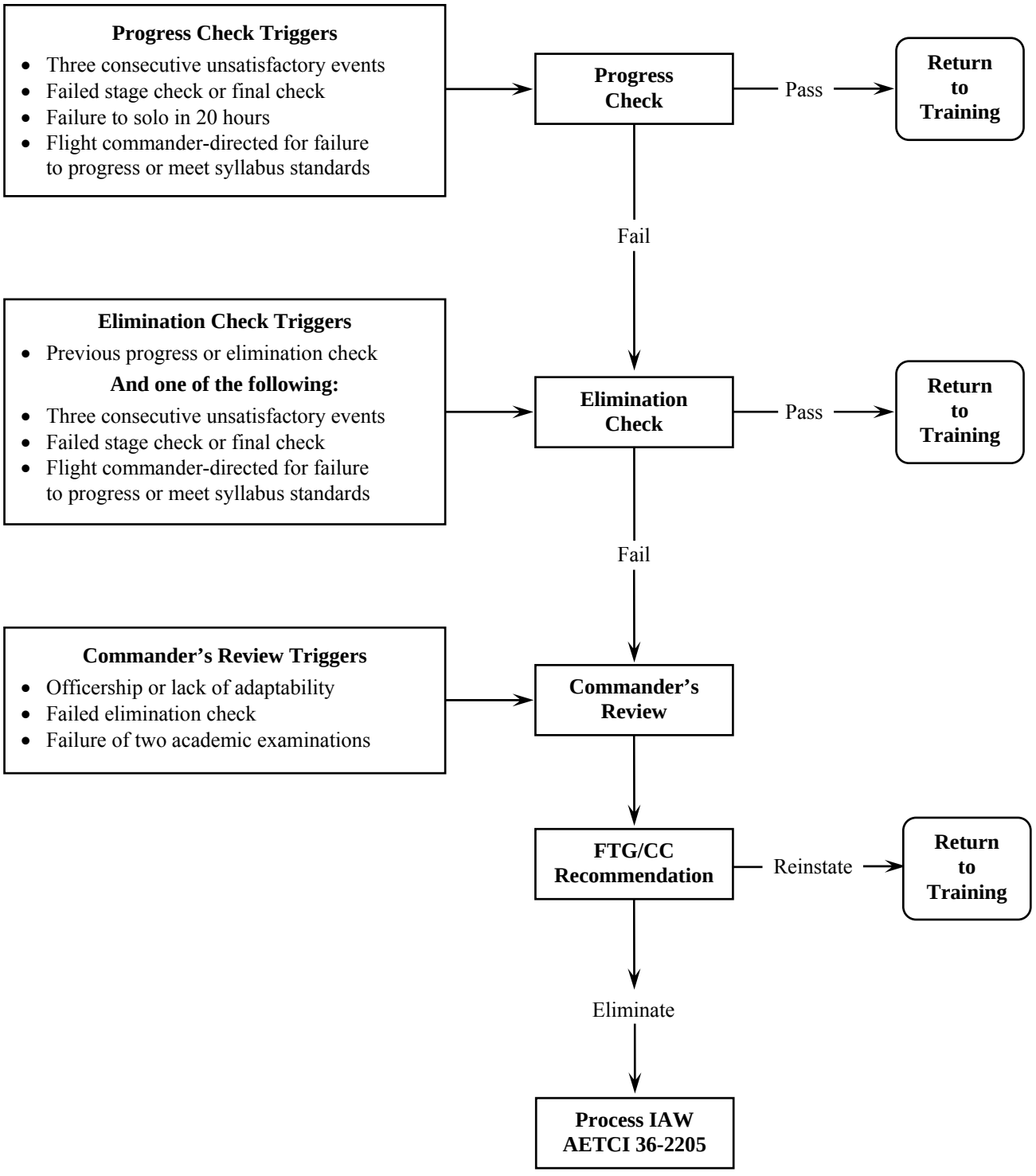

Figure 2–1 — Commander's Review Process

g. *Elimination Check (EC) —* Figure 2-1 shows a list of EC triggers. AT sorties are optional prior to an EC, but are not required. The 306 Det 1/CC may authorize each student up to two AT sorties before the EC. These sorties are not automatically given to every student, but are reserved for cases when the 306 Det 1/CC feels some training irregularity or anomaly has occurred and the student has demonstrated the potential to complete UFT. When assigning an overall grade, the EC pilot should consider the student's ability to complete the course within syllabus constraints as well as overall proficiency and situational awareness. The overall grade is NG or U. Document an EC as CX89 and include in the student's training folder. For elimination checks successfully completed and flown as a result of the student not soloing in any unit, the EC pilot certifies the student safe for solo and ensures the student is scheduled solo on the next syllabus sortie. A student who fails an EC is entered in the commander's review process according to AETCI 36-2205.

h. Stage Check, Final Check, Progress Check, and Elimination Check Procedures

(1) The following table identifies check pilots and the types of checks they are authorized to administer. Individuals designated by the 306 Det 1/CC complete a checkout program and are certified by the squadron commander. Only highly qualified QAEs and CFIs may be certified as PC pilots.

(2) The objective of the final check is to ascertain a student's ability to adapt to military flying and complete UFT. Normally military officers conduct the final checks (C790,) but exceptions may be made at the discretion of the 306 Det 1/CC.

	Stage Check	***Final Check***	***Progress Check***	***Elimination Check***
306 Det 1/CC/DO	**X**	**X**	**X**	**X**
Designated Military IPs	**X**	**X**	**X**	**X**
Contractor's Chief Pilot	**X**	**X**	**X**	**X**
Designated CFIs	**X**	**X**		

i. *Passing a PC/EC —* Passing a PC/EC fulfills the requirements of the sortie that caused it to be flown and may be used to complete a unit if appropriate. If the next sortie is the stage check or final check and all check objectives are satisfied on the PC/EC, the PC/EC substitutes for the check.

12. Solo Requirements and Restrictions

a. Prior to flying C501 each student must pass a written test (F111,) demonstrating adequate knowledge of

(1) Federal Aviation Regulations (Title 14 Code of Federal Regulations, Parts 61 and 91.)

(2) Airspace rules and procedures for the airport where the solo flight is flown.

(3) Flight characteristics and operational limitations for the make and model of aircraft to be flown.

b. At the conclusion of the test, all incorrect answers are reviewed before conducting the flight.

c. Accomplish both sorties of C5XX on the same day. Fly C587, including the minimum requirements of C501, if conditions change significantly between C501 and C502 or there is more than a one day break between C501 and C502. Where possible, use the same aircraft for the solo flight (C502) as was used on the dual sortie (C501).

d. Failure to accomplish three solo landings on C502 due to circumstances beyond the student's control does not require the sortie to be incomplete.

e. Students may not fly solo unless they have had a dual flight in the preceding 7 calendar days during which they accomplished a landing to at least a safe (Fair) level of proficiency.

f. C60X, area solo, is complete if the student pilot departs the local traffic pattern, enters a training area, returns to the local traffic pattern, and lands.

g. An instructor briefs the student prior to all solo flights. IPs having continuity with the student should accomplish and document the briefing in the training folder. Each briefing must cover all mission objectives to be accomplished and any other items appropriate to the mission.

13. Minimum Scheduled Student Turn-Times — Aircraft to Aircraft — 3+00
Aircraft to Classroom — 2+30

14. Commander's Review Process (CRP) — Figure 2-1 depicts the triggers and decision-making flow for progress checks, elimination checks, and commander's reviews. Students reinstated into training after a commander's review (CR) because of a flying deficiency must fly an elimination check following completion of the additional training sorties authorized in the reinstatement write-up.

15. Cockpit / Crew Resource Management (CRM) — Integrate CRM skills into flight briefings and debriefings, using the provisions of AFI 11-290, *Cockpit / Crew Resource Management Training Programs* and the AETC Supplement as guidelines. Gradesheets contain the following CRM items IAW AETC Sup 1 to AFI 11-290:

a. Mission Planning / Briefing / Debriefing

b. Communication

c. Risk Management /Decision Making

d. Situational Awareness

e. Task Management

Section C — Grading Procedures

1. Maneuver Grading — There are two methods of grading student performance: an absolute grading scale for rating individual maneuver items and a relative grading scale for assessing overall sortie performance.

2. Absolute Rating Scale — Instructors judge the student's performance of maneuvers against the course training standards (CTSs) in this syllabus. Grade maneuvers on the student's characteristic performance. This grade does not consider the student's type and amount of training.

Proficiency Maneuver Grades	***MIF Level***	***Description***
No Grade (NG)	**1**	Enter NG on the record of training when the maneuver is demonstrated by an instructor pilot on a dual sortie, but not practiced by the student. On solo sorties, enter NG for maneuvers flown, but not observed.
Unable to Accomplish (U)	**2**	The student is unsafe or lacks sufficient knowledge, skill or ability to perform the operation, maneuver or task.
Fair (F)	**3**	The student performs the operation, maneuver or task safely but has limited proficiency. Deviations occur which detract from performance.
Good (G)	**4**	The student performs the operation, maneuver or task satisfactorily. Deviations occur which are recognized and corrected in a timely manner.
Excellent (E)	**5**	The student performs the operation, maneuver or task correctly, efficiently and skillfully. Minor deviations occur which do not detract from the overall performance.

3. Relative Grading Scale — The instructor uses the relative grading criteria to assess overall sortie performance with grades of Excellent (E), Good (G), Fair (F) or Unsatisfactory (U). Students are expected to progress as they advance in training. Students may receive grades of F or U on individual maneuvers

new to them, but still receive a grade of E for overall sortie performance. A student's continued lack of progress should be reflected in an overall sortie performance grade of F or U, even if only a U is required for the maneuver proficiencies. The instructor grades the student with an overall grade of U if any maneuver is graded U when an F or G level of proficiency is required.

4. Maneuver Item File (MIF) — Maneuvers followed by a plus (+) must be accomplished in the specified unit. Students do not fly maneuvers without a number. An IP may accomplish a non-numbered maneuver if required (proficiency, unexpected weather, etc.) Maneuvers with a number but without a plus (+) may be accomplished, but students must meet MIF standards by the end of the unit. Do not accomplish maneuvers that do not show a number next to them on the MIF.

5. Solo Flight Grading Procedures — Grade solo sorties NG or U overall, with grades of NG or U on individual maneuvers flown. If a maneuver is graded U, the overall grade is U.

6. Incomplete Sorties — The contractor's Chief Pilot/306 Det 1/DO determine when a sortie is incomplete and grade it NG. If a maneuver is graded U when an F or G level of proficiency is required, the sortie is complete and the overall grade is U. Document all incomplete lessons or maneuvers deferred to the next lesson in the student training folder.

Section D — Course Training Standards (CTS)

1. Purpose — These standards outline the tasks and proficiency required of graduates of this syllabus. This program prepares students to enter UFT with a high probability of completing the training.

2. Duties and Responsibilities — The student accomplishes the following:

a. Plan the mission.

b. Ensure the aircraft is preflighted, inspected, loaded, and equipped to perform the assigned mission.

c. Operate the aircraft to perform the mission using sound judgment and situational awareness.

3. General Proficiency Standards

a. Accomplish training standards in conjunction with clearing visually outside the aircraft.

b. Aircraft control must be smooth and positive. Flight control and throttle inputs that are characteristically imprecise and erratic can warrant an unsatisfactory grade even if numerical standards are met. Slight deviations in establishing or maintaining the proper or desired aircraft attitude or position may occur during the maneuver being performed.

c. Momentary deviations beyond flight value tolerances are acceptable if corrections are timely and flight safety is not compromised. The effects of weather (turbulence, for example) are considered when determining grades.

d. Procedural knowledge and application must be in accordance with applicable directives and allow the mission to be accomplished efficiently. If individual tasks require pre-mission planning, the standards from **Mission Planning** / **Briefing** / **Debriefing** apply.

e. Standards equate directly to the grade scale of **Good** unless otherwise stated. For example, tasks trained to the grading level of **Fair** reflect the statement "safe level of proficiency" in the appropriate standard. Special performance tasks requiring introduction or ground training are specified under the job task ***Performance*** description. Maneuvers containing *Practice* in the standard do not require proficiency for graduation.

f. Where no specific standard is stated, these general standards and those of **Basic Control** apply.

4. Employment

a. Conduct training under VMC.

b. The MIF regulates student progression to meet required standards prior to course completion. Evaluate performance using the Course Training Standards.

5. Tasks — The following table specifies the standards of performance required of each course graduate.

Performance	*Conditions*	*Standards*
1. Mission Planning / Briefing / Debriefing		
a. Perform appropriate mission planning to include computing takeoff and landing data: plan mission profile and alternate course of action where appropriate.	a. Air navigation computer, plotter, appropriate forms, and aeronautical charts. b. Access (in person, internet, or telephone link) to FAA or military weather briefing facility. c. *FLIP*, NOTAMs, local instructions, syllabus, flight manual, and checklist.	a. Plan mission in a timely manner to meet maneuver requirements, correctly complete all applicable Air Force and command forms, and comply with all directives.
2. Ground Operations		
a. Perform preflight inspection of aircraft including maintenance documentation and perform Starting Engine, Before Taxiing, and Taxiing checklists.	a. Checklist and inflight guide. b. Aircraft ready for inspection. c. Fire extinguisher available. d. Aircraft engine limitations memorized. e. Appropriate aircraft forms	a. Correctly complete all checks in accordance with flight manual. b. Determine aircraft status and accept or reject the aircraft.
b. Taxi to takeoff position and, after landing, to parking area. Complete appropriate checklists.	a. Designated taxi route. b. Checklist and inflight guide.	a. Follow prescribed taxi routes while maintaining safe speeds b. Visually clear for traffic and avoid obstacles during taxi c. Maintain proper control deflection for wind conditions d. Correctly complete all checks in accordance with the flight manual
c. Check engine condition and aircraft configuration prior to takeoff. Complete Before Takeoff checklist.	a. Checklist and inflight guide.	a. Make a proper decision to accept or reject airplane after engine checks. b. Properly configure the airplane for takeoff. c. Correctly complete all checks in accordance with the flight manual.
d. Perform the Engine Shutdown checklist	a. Checklist and inflight guide.	a. Correctly complete all checks in accordance with the flight manual.
e. Perform postflight duties	a. Checklist, inflight guide, and aircraft forms.	a. Correctly complete all checks in accordance with the flight manual.
3. Takeoff and Climb		
a. Perform a takeoff to include: (1) Complete Before Takeoff or Touch-and-Go checklist (2) Check aircraft performance (3) Maintain directional control and proper wind-drift correction throughout takeoff and climb (4) Rotate and takeoff at recommended speeds. (5) Accelerate to designated climb speed	a. Runway with a centerline stripe and current wind information.	a. Maintain runway alignment ±10 feet during takeoff roll. b. Establish and maintain proper takeoff attitude and become airborne at appropriate airspeed for existing conditions. c. Hold correct pitch attitude to attain and maintain climb speed +10 to –5 KIAS.
4. Departure		
a. Turn aircraft to clear traffic pattern at prescribed altitude.	a. Published pattern procedures or ATC directions.	a. Initiate turn out of traffic and fly initial heading or groundtrack consistent with procedural directives.

Performance	*Conditions*	*Standards*
b. Turn to proceed to navigation points at the prescribed altitude and airspeed or IAW instructions from ATC.	a. Published departure instructions or ATC directions.	a. Follow local departure procedures.
c. Overfly designated corridor entry point (if designated).	a. Local area map.	a. Recognize and track to within ½ NM of corridor entry point with limited assistance from the instructor pilot.
d. Navigate and fly the aircraft to the area.	a. Ground references on the departure route.	a. Use map, inflight guide and ground references to navigate to the area with limited assistance from the instructor pilot.
e. Level off at assigned altitude.	a. Prescribed or ATC-directed altitude.	a. ±100 feet of desired altitude.
5. Basic Aircraft Control / Inflight Planning / Clearing / Cross-Check		
a. Maintain basic aircraft control.	a. At all times.	a. ±100 feet of desired altitude. b. ±10 KIAS of desired airspeed. c. ±10 degrees of desired heading. d. Maintain coordinated flight, no more than ½ ball off-center e. Maintain smooth and positive control consistent with flight conditions
b. Perform inflight planning to include changing profile or adding or deleting maneuvers.	a. Preplanned mission profile.	a. Able to adjust mission profile to comply with time and/or fuel limitations, weather, and area limits.
c. Visually clear outside the aircraft. See and avoid inflight hazards.	a. Day, VMC.	a. Recognize actual or potential conflicts and adjust aircraft performance to safely avoid those conflicts. (1) Effectively utilize accepted visual clearing techniques to avoid conflicts. (2) Effectively employ radio to aid in clearing tasks.
6. Local Area Procedures		
a. Maintain area orientation and remain within assigned area limits.	a. Working area commensurate with type of mission, within specified boundaries defined by VOR radials and DME, and or ground references, and upper and lower altitude boundaries.	a. Remain within area boundaries with ground references. b. Use assigned airspace in an efficient manner with minimum delay between maneuvers.
7. Straight-and-Level Flight		
a. Maintain altitude, airspeed, and heading or ground track.	a. Discernible horizon.	a. ±100 feet of desired altitude. b. ±10 KIAS of desired airspeed. c. ±10 degrees of desired heading. d. Maintain coordinated flight, no more than ½ ball off-center e. Maintain smooth and positive control consistent with flight conditions
8. Climbs and Descents		
a. Maintain climb and descent schedules.	a. Appropriate climb and descent schedules.	a. Maintain airspeed ±10 KIAS of desired airspeed.
b. Maintain heading or bank angle and coordinated flight.	a. Prescribed heading and course.	a. ±10 degrees of desired heading or bank angle. b. No more than ½ ball off-center.

Performance	*Conditions*	*Standards*
c. Maintain required power.	a. Desired altitude and climb or descent schedule.	a. Use appropriate power for climbs and descents.
d. Level off at assigned altitude.	a. Desired altitude.	a. ±100 feet of desired altitude. b. ±10 degrees of desired heading. c. Maintain coordinated flight, no more than ½ ball off-center d. Maintain smooth and positive control consistent with flight conditions.
9. Turns		
a. Roll into and maintain designated bank angle.	a. Aircraft in level flight b. Designated bank angle.	a. ±10 degrees of desired bank angle.
b. Maintain altitude.	a. Designated altitude.	a. ±100 feet of desired altitude.
c. Return to wings-level after a designated turn.	a. Designated rollout heading.	a. Obtain rollout heading ±15º.
d. Maintain coordinated flight.	a. Functional turn and slip indicator.	a. No more than ½ ball off-center.
10. Slow Flight Maneuvering		
a. Control altitude, airspeed, bank angle, and yaw	a. Minimum altitude: 1,500 feet AGL b. Proper configuration	a. +10 KIAS, –0 KIAS airspeed b. ±100 feet of desired altitude. c. ±10 degrees of desired heading. d. Maintain coordinated flight, no more than ½ ball off-center e. Maintain smooth and positive control consistent with flight conditions f. +0/–10 degrees of desired bank angle (not to exceed 30º)
11. Steep Turns		
a. Maintain altitude, airspeed, and yaw and roll into a 45º bank angle.	a. Aircraft in level flight at a designated airspeed and altitude.	a. ±100 feet of desired altitude. b. ±10 KIAS of desired airspeed. c. Maintain bank angle ±10º. d. Maintain coordinated flight, no more than ½ ball off-center e. Maintain smooth and positive control consistent with flight conditions
b. Roll out on entry heading after turning 360º.	a. Designated roll-in and roll-out reference.	a. Roll out on designated heading within ±30º.
12. Power-Off and Power-On Stalls		
a. Perform power-off and power-on stalls in full-flap and no-flap configurations.	a. Minimum altitude 1,500 feet AGL b. Proper configuration	a. Recognize and announce first indications of the impending stall. b. Initiate recovery IAW flight manual procedures, upon encountering significant aerodynamic buffeting or after control effectiveness is lost.
b. Control bank and yaw during entry.	a. Specified entry parameters.	a. Maintain heading ±10º in straight flight. Maintain ±10º of entry bank angle (20º max.) b. Maintain coordinated flight, no more than ½ ball off-center

Performance	*Conditions*	*Standards*
c. Recover from stalls.	a. Stall warning indication b. Minimum altitude 1,500 feet AGL	a. Recover to level flight with minimum loss of altitude. (Recovery confirmed by altimeter and VSI.) b. Maintain coordinated flight, no more than ½ ball off-center c. Maintain smooth and positive control consistent with flight conditions d. Recognize secondary stall, if entered, and recover properly.
13. Ground Reference Maneuvers		
a. Perform S-turns, rectangular courses, and turns around a point.	a. Minimum altitude 500 feet AGL b. Prescribed airspeed	a. Exhibit knowledge of the elements related to S-turns, rectangular courses, and turns around a point. b. Determine wind direction/speed. c. Enter maneuver between 600 to 1,000 feet AGL, on the appropriate heading to begin the maneuver. d. Apply drift corrections. e. Maintain altitude ±100 feet. f. Maintain airspeed ±10 KIAS. g. Exit the maneuver as prescribed.
14. Basic Instrument Maneuvers		
a. Perform straight and level flight by reference to instruments.	a. Aircraft outside of the traffic pattern. b. Vision restriction device.	a. Maintain straight and level flight solely by reference to instruments. b. Maintain altitude ±200 feet, c. Maintain heading ±20º. d. Maintain airspeed ±10 KIAS.
15. Navigation Procedures VOR		
a. Operate and interpret VOR navigation equipment.	a. Aircraft equipped for instrument flight. b. In-range, VOR navigational facility(s).	a. Properly tune, identify and monitor navigational aids. b. Locate aircraft position using navigational equipment. c. Navigate using navigational equipment.
16. Simulated Forced Landing		
a. Perform simulated forced landing.	a. Aircraft with a simulated engine failure. b. Runway or field suitable for a forced landing. c. Minimum altitude 500 feet AGL, except over a runway.	a. Establish and maintain recommended best-glide attitude, configuration, and airspeed ±10 KIAS. b. Select suitable emergency landing area within gliding distance. c. Plan and follow a flight pattern to the selected landing area considering altitude, wind, terrain, and obstructions. d. Follow the appropriate emergency checklist. e. Maintain positive control of the airplane at all times.
17. Arrival		
a. Overfly designated training area exit point (if designated).	a. Local area map.	a. Recognize and track to within ½ NM of corridor entry point with limited assistance from the instructor pilot.

Performance	*Conditions*	*Standards*
b. Turn to proceed to navigation points at the prescribed altitude and airspeed or IAW instructions from ATC.	a. Published arrival instructions or ATC directions.	a. Follow local arrival procedures.
c. Perform letdown and traffic entry to the home field or auxiliary field.	a. Published recovery procedures or radar vectors.	a. Maintain altitudes and groundtrack depicted in recovery procedure. b. ±100 feet of desired altitude. c. ±10 KIAS of desired airspeed. d. ±10 degrees of desired heading. e. Maintain coordinated flight, no more than ½ ball off-center f. Maintain smooth and positive control consistent with flight conditions
18. Traffic Patterns		
a. Navigate to pattern entry point.	a. Published arrival procedures or ATC directions. b. Inflight guide and local area map.	a. Use map, inflight guide, and ground references to navigate to the traffic pattern entry point.
b. Perform traffic pattern.	a. Published pattern altitude, airspeeds, groundtrack, and final approach.	a. Establish and maintain appropriate groundtrack. b. Maintain proper spacing from other aircraft. c. Maintain airspeed ±10 KIAS. d. Maintain altitude ±100 feet. e. Configure the aircraft as appropriate for pattern.
19. Normal, No-Flap, and Forward Slip Approaches and Landings		
a. Perform approaches and landings (transition from glidepath to runway).	a. Aircraft established on proper visual glidepath. b. Aircraft properly configured. c. Various wind conditions.	a. Select suitable touchdown point. b. Establish recommended approach and landing configuration. c. Maintain stabilized approach and recommended approach speed +10, –0 KIAS. d. Maintain crosswind correction and directional control throughout approach and landing. e. Make smooth, timely, and correct control applications during the roundout and touchdown. Touch down smoothly within the first 1,000 feet of the runway (1,500 feet, no-flap), with no side drift, and with airplane's longitudinal axis aligned with and over the runway centerline ±15 feet.
b. Slow aircraft from touchdown speed to taxi speed and depart the runway.	a. Aircraft on the runway centerline. b. Aircraft properly configured	a. Make smooth, timely, and correct flight control and brake inputs b. Maintain crosswind correction and directional control throughout rollout and exit from runway.

Performance	*Conditions*	*Standards*
20. Go-Around		
a. Perform a go-around from approach or landing.	a. Aircraft configured for approach or landing. b. Aircraft in the approach or landing phase.	a. Make a timely decision to discontinue the approach or landing. b. Apply takeoff power and establish the proper climb attitude. c. Retract flaps IAW the flight manual. d. Maintain takeoff power to a safe maneuvering altitude, then set power to maintain appropriate pattern speeds. e. Maintain directional control and proper wind-drift correction throughout the climb.
21. Breakout		
a. Perform breakout procedures.	a. Aircraft in the traffic pattern with insufficient spacing from other aircraft. b. Published breakout procedures c. Inflight guide and local area map.	a. Make a timely decision to breakout. b. Establish and maintain appropriate groundtrack. c. Maintain proper spacing from other aircraft. d. Maintain airspeed ±10 KIAS. e. Maintain altitude ±100 feet.
22. Clearing / Collision Avoidance Precautions		
a. Perform cockpit and mission tasks while visually and aurally (with radios) avoiding other aircraft and ground obstacle conflicts.	a. Aircraft in flight or on the ground.	a. Recognize actual or potential conflicts and adjust aircraft movement to safely avoid conflicts. Effectively use accepted visual clearing techniques to avoid conflicts. Effectively employ the radio to aid in clearing.
23. Checklist Use		
a. Complete inflight checks.	a. Checklist and inflight guide.	a. Complete checks at the proper times in the mission. b. Use challenge and response format on dual flights
24. Trim		
a. Use trim to relieve control pressures and improve aircraft control.	a. Aircraft with changing pitch and airspeed.	a. Trim the aircraft to establish a stable pitch attitude. (Aircraft pitch does not change appreciably if controls are released.)
25. Communication		
a. Perform required verbal communications. (1) Normal and emergency transmissions with ATC and other agencies (2) Intercockpit communications.	a. Operable radios and intercom.	a. Make FLIP required radio calls. b. Select appropriate frequencies. c. Use recommended terminology. d. Acknowledge radio communications and comply with instructions. e. Understand and prioritize transmissions in a multiple communications environment.

Performance	*Conditions*	*Standards*
26. Risk Management / Decision Making		
a. Assess risks and make appropriate decisions	a. FARs, aircraft POH, and USAF instructions and directives.	a. Properly gather all available data before arriving at a final decision. b. Select suitable course of action using logical and sound judgment based on available information. c. Accurately identify contingencies and alternatives. d. Modify actions as necessary to obtain the best outcome.
27. Situational Awareness		
a. Maintain situational awareness to include the following areas: (1) *Awareness* — Correlate and keep track of what happens on the ground, in own aircraft, and other flight members, and cope with any subsequent mission impact as a result of these happenings. (2) *Flexibility* — Cope with rapidly changing situations or conditions, inflight or on the ground, and adjust mission as needed to obtain desired objectives. (3) *Capacity* — Recognize loss of situational awareness, respond effectively, institute valid measures to preserve situational awareness and prevent spatial disorientation.	a. During mission profile.	a. Demonstrate ability to minimize the effects of adverse factors and capitalize on opportunities to avoid mission degradation. Factors to consider may include, but are not limited to, such items as weather conditions, airspace and approach restrictions, high-density traffic, aircraft capabilities and limitations, and fuel conservation. b. Maintain fuel awareness during all phases of flight to include bingo fuel, alternate/divert fuel, recovery fuel, etc. c. Correctly assess all possible factors bearing on the situation. d. Have complete knowledge of all rules and regulations and carry out all duties with minimum supervision. e. Adapt to new situational demands.
28. Task Management		
a. Prioritize and manage tasks, based on existing and new information, while maintaining constructive behavior under stress. (1) Cognizant of how large a task loading they can cope with before becoming saturated, confused or frustrated to the degree that safety is jeopardized or the mission is ineffective. (2) Follow orders and carry out all required procedural steps in the proper sequence.	a. During mission profile.	a. Correctly prioritize multiple tasks to avoid saturation or under-tasking. b. Use all available resources to manage workload. c. Ask for assistance when overloaded. d. Accept better ideas when offered. e. Focus attention on task at hand.
b. Perform all inflight checks in conjunction with all other tasks.	a. During mission profile. b. Checklist and inflight guide.	a. Correctly prioritize multiple tasks to avoid saturation or under tasking. b. Complete all checklist items correctly and at proper point in mission. c. Challenge and response used during dual flights.

Performance	*Conditions*	*Standards*
29. Emergency Procedures		
a. Perform critical action emergency procedures	a. Simulated engine loss and practice forced landing procedures. b. Ground training for other emergencies. c. Checklist and inflight guide.	a. Analyze the situation and take the appropriate action. b. Perform and/or state proper steps in critical action procedures, from memory, without error. c. Use proper checklist and inflight guide as necessary. d. Perform or state proper steps to satisfactory conclusion.
b. Perform non-critical action procedures to include analysis of hypothetical aircraft malfunctions.	a. Hypothetical aircraft malfunctions and emergency situations. b. Checklist and inflight guide.	a. Analyze the situation and take the appropriate action. b. State proper steps to resolve non-critical action emergencies using proper checklist and inflight guide as required.
30. General Knowledge		
a. Demonstrate knowledge of aircraft systems, flying instructions, applicable procedures, associated directives, and instructions.	a. Study guides, instructions, and manuals.	a. Demonstrate a thorough understanding of aircraft systems. b. Be able to apply procedures from tech orders and associated directives. c. Refer to applicable publications as necessary.

Chapter 3

Academic Training

Note — Students must complete lessons G101, G102 and G103 prior to C101.

Unit	***Title***	***Hours***
G101	Commander / Operations Officer Briefing / In-processing	2.0
G102	Chief Instructor / Flight Scheduler Briefing	1.0
G103	Local Area Procedures	2.0
G104	Airplane Systems (Airplanes, Powerplant and Related Systems, Flight Instruments)	1.5
G105	Aerodynamic Principles Application (Four Forces of Flight, Stability, Maneuvering Flight)	1.5
G106	Airplane Performance (Predicting Performance, Weight and Balance)	1.0
G107	Flight Environment (Safety, Airports, Aeronautical Charts, Airspace, Radar Services, Radio, and applicable sections of FAR Parts 61 and 91)	6.0
G108	Weather (Reading METARs / TAFs, Weather Hazards, Weather Limits)	1.0
G109	Navigation (Pilotage and Dead Reckoning, VOR Navigation)	1.0
G110	Written Examination	1.0
	Total	18.0

Chapter 4

Flying Training

Section A — Ground Training

Unit	*Title*	*Hours*
F101	Preflight / Postflight and Preparations and Procedures	2.0
F102	Airport Operations	1.0
F103	Takeoffs, Landings, and Go-Arounds	1.0
F104	Slow Flight and Stalls	1.0
F105	Ground Reference Maneuvers	1.0
F106	Basic Instrument Maneuvers	1.0
F107	Navigation	1.0
F108	Emergency Operations	1.0
F109	Flight Safety / Operational Risk Management	1.0
F110	Cockpit / Crew Resource Management	1.0
F111	Presolo written examination	1.0
	Total	12.0

Section B — Aircraft

Unit	*Title/Objectives*	*Sorties Dual/Solo*	*Hours Dual/Solo*
C101	**Orientation (Pre-Solo)**	1/0	1.4/0
	Objectives — Students practice basic aircraft control while adapting to the aircraft and basic maneuvers. Checklist Use Ground Operations Basic Aircraft Control Departure and Arrival		
C201 – 03	**Fundamental Maneuvers (Pre-Solo)**	3/0	4.2/0
	Objectives — Students build on basic aircraft control while adding additional maneuvers. Slow Flight Maneuvering Steep Turns Power-On Stalls / Power-off stalls Traffic Patterns Approach and Landing No-Flap Approach and Landing Forward Slips to a Landing Breakout and Go-Around VOR Operation / Orientation		
C301 – 06	**Fundamental Maneuvers (Pre-Solo)***	6/0	8.4/0
	Objectives — Students build on basic aircraft control and gain proficiency, while adding additional maneuvers. Previously introduced maneuvers Ground reference maneuvers Simulated Forced Landing		

* 1 sortie should be flown pattern-only

Special Syllabus Requirement — Students accomplish an arrival and traffic pattern at an alternate/auxiliary airfield (e.g., Fowler or Fremont County Airport)

Unit	*Title/Objectives*	*Sorties Dual/Solo*	*Hours Dual/Solo*
C490	**Stage Check**	1/0	1.4/0
	Objectives — Evaluate student performance in previously introduced maneuvers (includes ~1-hour ground eval)		
C501 – 02	**Supervised Solo**	1/1	0.9/0.5
	Objectives — Students successfully fly the aircraft solo. (Prior to solo flight, ensure testing and documentation are complete.) Dual — 3 satisfactory patterns / landings, Breakout, Go-Around Solo — Normally 3 patterns / landings (min)		
C601 – 05	**Maneuvers (Post-Solo)** / **Basic Instrument Maneuvers**	4/1	5.6/1.2
	Objectives — Students improve aircraft control and gain confidence while practicing basic instrument procedures. Practice previously introduced maneuvers Basic instrument maneuvers VOR orientation Fly one area solo sortie (not flown as C601) Practice final check profile		
C790	**Final Check**	1/0	1.4/0
	Objectives — Students perform the required maneuvers and a cross-section of maneuvers to the proficiency level required by the MIF. As a minimum, evaluate the following: General Knowledge / EP evaluation (~ 1-hour ground eval) Normal Takeoff / Departure Area work: Slow Flight, Steep Turns, Power-On Stalls, Power-Off Stalls, area emergency approach and landing, sampling of basic instrument maneuvers, navigation procedures Pattern work: Traffic Patterns, Normal Approach and Landing. Sampling of Go-Arounds, Breakouts, No-Flap Approach and Landing, Forward Slip to a Landing, Emergency Approach and Landing		
	Total Aircraft Sorties / Hours	17 / 2	23.3 / 1.7

Aircraft Maneuver Item File								
Man No	***Maneuver***	***Lesson Units / Sorties***						
		C1/1	**C2/3**	**C3/6**	**C4/1**	**C5/2**	**C6/5**	**C7/1**
1	Mission Planning / Briefing / Debriefing	2+	2+	3+	3+	3+	4+	4+
2	Ground Operations	2+	2+	3+	3+	3+	4+	4+
3	Takeoff	2	2+	3+	3+	3+	4+	4+
4	Departure	2	2+	3+	3+	3	4+	4+
5	Basic Aircraft Control	2+	3+	3+	3+	3+	4+	4+
6	Local Area Procedures	2+	2+	3+	3+	3+	4+	4+
7	Straight-and-Level Flight	2+	2+	3+	3+	3+	4+	4+
8	Climbs and Descents	2+	2+	3+	3+	3+	4+	4+
9	Turns	2+	2+	3+	3+	3+	4+	4+
10	Slow Flight Maneuvering		2+	2+	3+		4+	4+
11	Steep Turns		2+	3+	3+		4+	4+
12	Power-Off and Power-On Stalls		2+	3+	3+		4+	4+
13	Ground Reference Maneuvers	2	2	3+	3		3	3
14	Basic Instrument Maneuvers			2	2		3+	3+
15	Navigation Procedures	2	2	2+	2		3+	3+
16	Simulated Forced Landing		2	3+	3+	3	4+	4+
17	Arrival	2	2+	3+	3+	3	4+	4+
18	Traffic Patterns	2	2+	3+	3+	3+	4+	4+
19	Approach and Landing	2+	2+	3+	3+	3+	4+	4+
20	No-Flap Approach and Landing	2	2+	3+	3	3	3	3
21	Forward Slip to a Landing	2	2+	3+	3	3+	3	3
22	Go-Around	2	2+	3+	3+	3+	4+	4
23	Breakout	2	2	3+	3	3+	3	3
24	Clearing / Collision Avoidance Precautions	2+	2+	3+	3+	3+	4+	4+
25	Inflight Checks	2+	2+	3+	3+	3+	4+	4+
26	Trim	2+	2+	3+	3+	3+	4+	4+
27	Throttle Technique	2+	2+	3+	3+	3+	4+	4+
28	Communication	2+	2+	3+	3+	3+	4+	4+
29	Risk Management / Decision Making	2+	2+	3+	3+	3+	3+	3+
30	Situational Awareness	2+	2+	3+	3+	3+	3+	3+
31	Task Management	2+	2+	3+	3+	3+	3+	3+
32	Emergency Procedures	2	2+	3+	3+	3+	4+	4+
33	General Knowledge	2+	2+	3+	3+	3+	4+	4+
34	Special Syllabus Requirements			2+				

Chapter 5

General Instructions

Section A — Course Prerequisites

Syllabus Event	*Prerequisite 1*	*2*	*3*
Academics			
G101			
G102			
G103			
G104			
G105	G104		
G106	G105		
G107	G106		
G108	G107		
G109	G108		
G110	G109	F111	
Ground Training			
F101			
F102	F101		
F103	F102		
F104	F103		
F105	F104		
F106	G107		
F107			
F108			
F109			
F110			
F111	F110	C305	
Aircraft			
C101	G103	F103	
C201	C101	F104	
C202	C201		
C203	C202	G104	
C301	C202	G106	F105
C302	C301		
C303	C302	G107	
C304	C303		
C305	C304	F110	
C306	C305		
C490	C306	F111	
C501	**C490**		
C502	C501		
C601	C502		
C602	C601		
C603	C602		
C604	C603	G110	
C605	C604		
C790	C605		

Section B — Bibliography

		Basis of Issue
1.	**Training Manuals, Technical Orders, and Instructions**	
	a. *Pilot Operating Handbook / Flight Manual*	1/student
	b. *Pilot's Abbreviated Flight Crew Checklist*	1/student
	c. *306 Det 1 Inflight Guide*	1/student
	d. *306 Det 1Local Area Procedures*	1/student
	e. AETCI 36-2205 *Formal Aircrew Training Administration and Management*	1/course
	f. AFI 11-290, *Cockpit / Crew Resource Management Training Programs*	1/course
2.	**Syllabus**	
	a. AETC Syllabus S-V8A-S, *Initial Flight Screening*	1/instructor
3.	**Instructor Guides and Student Guides**	
	a. *Aircrew Operational Procedures / Contractor Standard Operating Procedures*	1/student

Section C — Glossary

Abbreviation or Acronym	*Definition*	*Abbreviation or Acronym*	*Definition*
AETC	Air Education and Training Command	IFT	Introductory Flight Training
AETCI	AETC Instruction	IMC	Instrument Meteorological Conditions
AF	Air Force	KIAS	Knots Indicated Airspeed
AFROTC	AF Reserve Officer Training Corps	MIF	Maneuver Item File
AFS	Academy Flight Screening	MOA	Manifestation of Apprehension
AFTO	AF Technical Order	NDB	Non-Directional Radio Beacon
AGL	Above Ground Level	OG/CC	Operations Group Commander
AT	Additional Training	OPR	Office of Primary Responsibility
CAP	Commander's Awareness Program	PC	Progress Check
CBT	Computer-Based Training	POH	Pilot Operating Handbook
CPT	Cockpit Procedures Trainer	PT	Physical Training
CRM	Cockpit / Crew Resource Management	RPA	Remotely Piloted Aircraft
CRP	Commander's Review Program	RPM	Revolutions per Minute
CSO	Combat Systems Officer	SFL	Simulated Flame-Out Landing
CTS	Course Training Standards	SQ/CC	Squadron Commander
DME	Distance Measuring Equipment	SUPT	Specialized Undergraduate Pilot Training
EC	Elimination Check	TIMS	Training Integration Management System
EP	Emergency Procedure	UFT	Undergraduate Flying Training
FAR	Federal Aviation Regulations	USAF	United States Air Force
FLIP	Flight Information Publications	USAFA	United States Air Force Academy
IAW	In Accordance With	VMC	Visual Meteorological Conditions
IFS	Initial Flight Screening	VOR	VHF Omni-directional Range

Terms

Additional Training (AT) Sorties (Coded 87) — Additional sorties given for extended breaks in training, because of Commander's review process or for other reasons specified in the syllabus.

Cockpit/Crew Resource Management — The effective use of all available resources — people, weapon systems, facilities, equipment, and environment — by individuals or crews to safely and efficiently accomplish an assigned mission or task.

Commander's Awareness Program (CAP) — A management system used to focus supervisory attention on student's progress in training, specific deficiencies, and potential to complete the program. The flight commander administers CAP.

Commander's Awareness Program Report — A computer report showing the names of students placed on CAP for any reason and the results of their flying and academic lessons.

Commander's Review Program — A process to consider circumstances relative to a student's training and to arrive at specific recommendations regarding retention in training, elimination from training, and future training. The Commander's Review is governed by AETCI 36-2205.

Course — The entire program of preflight, flying, simulation, academics, and officer development conducted in all media during the programmed training days.

Daily Lesson Option Sheet — A computer listing of those activities a student is eligible to perform. It is used as a primary scheduling aid and lists students in the order of their priority to fly based on the results of previous lessons.

Elimination Check (EC Coded 89) — A special check given to determine whether a student should continue in training or be recommended for elimination.

Grade Report — A computer generated chronological listing of all the sorties accomplished by a student in each category.

Maneuver Item File (MIF) — A listing of all the maneuvers and proficiency required on each maneuver for all units.

Master Syllabus — A computer listing of all training activities, prerequisites, and desired training flow for UFT.

Operational Review Report — A daily report that identifies students who have displayed substandard performance. Students appear on the operational review report if:

a. One of the last four lessons was a progress/elimination check.

b. The average of the last four graded aircraft/simulator lessons is fair or less.

c. The student is graded unsatisfactory on a category check.

Part-Task Training — Training accomplished without maintaining flight continuity between maneuvers.

Pilot Candidate — An officer or cadet who is scheduled to attend SUPT or RPA training.

Progress Check (PC Coded 88) — A special check given to determine whether a student should continue in normal syllabus flow or be recommended for an elimination check.

Resource Management System (RMS) — A computer system for the management of courses.

Special Syllabus Requirements — Maneuvers required on a onetime basis are documented under this heading.

Student Activity Record (AF Form 4293) — A form included in the training folder used to record IP/supervisor comments concerning the training given to a student.

Student Résumé — A computer-generated chronological listing of all syllabus activities accomplished by a student.

Training Forecast Schedule — The Master Syllabus matched with the training calendar. It reflects event line information as well as specific dates syllabus lessons should be accomplished for a particular class.

Unit — A grouping of lessons in any category with the same first two numbers in the lesson designators and the same list of maneuvers and objectives. (Example, The C2XX unit, etc.)